IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO WESTERN DIVISION AT CINCINNATI				
THE KROGER CO., et al.,	*			
	*			
	*			
Plaintiffs,	*	JUDGE SANDRA S. BECKWITH		
,	*			
VS.	*			
	*	CIVIL ACTION NO. 1:10-cv-00161-SSB		
EXCENTUS CORPORATION,				
,	*			
	*			
Defendant.	*			
	*			
	*			
	*			

PLAINTIFFS' OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION AND SUMMARY

Pursuant to S.D. Ohio Pat. R. 105.4(a), Plaintiffs, The Kroger Co. et al., ("Kroger") respectfully submit this Opening Claim Construction Brief in support of their proposed claim constructions as set forth in the Substitute Joint Claim Construction and Prehearing Statement. [Doc# 48-1]. All supporting citations herein refer back to the Exhibits attached to the parties' original Joint Claim Construction and Prehearing Statement. [Doc# 45].

Nine patents allegedly assigned to the Defendant, Excentus Corporation ("Excentus"), are at issue in the litigation. Excentus asserts that four of the patents are infringed by Kroger, including U.S. Patent No. 6,321,984 ("the '984 patent"), U.S. Patent No. 6,332,128 ("the '128 patent"), U.S. Patent No. 7,383,204 ("the '204 patent"), and U.S. Patent No. 7,742,942 ("the '942 patent"). In all, Excentus asserts a total of twenty-eight (28) distinct patent claims.

Given the large number of patents and claims asserted, the parties have jointly identified forty-one (41) claim terms, phrases or clauses as being in dispute. Many of the phrases identified by the parties are substantial duplicates of other phrases indentified in related claims. In some instances, an identified term is subsumed within a separately identified phrase. Thus, the number of terms, phrases or clauses actually requiring substantive construction is much less than forty-one (41).

Each claim term or phrase identified by Kroger represents a separate basis upon which Kroger contends that it does not infringe. S.D. Ohio Pat. R. 105.4(a) states that "each party shall serve and file an Opening Claim Construction Brief concerning the proposed construction of each claim term or phrase that the parties have identified as being in dispute in each patent." Kroger has complied with that mandate and contends that each dispute between the parties regarding claim scope must be resolved by the Court as a matter of law.

II. CLAIM CONSTRUCTION PROCEDURE

The claims of a patent define the protected invention that the patentee may exclude others from practicing. *Philips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*). The purpose of "claim construction" is to determine the meaning and scope of the claims that the patentee asserts are being infringed. *O2 Micro International Ltd. v. Beyond Innovation Tech.*Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008). When the parties raise a dispute regarding the proper scope of an asserted patent claim, the court, not the jury, must resolve that dispute. *Id.*; *Every Penny Counts, Inc. v. American Express Co.*, 563 F.3d 1378 (Fed. Cir. 2009) ("[T]he court's obligation is to ensure that questions of the scope of the patent claims are not left to the jury."). Claim construction is a question of law exclusively within the province of the court. *Markman v Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996).

The words in a claim are generally given their ordinary and customary meaning.

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). However, the ordinary and customary meaning of disputed claim language is not simply the meaning to a layperson who is unfamiliar with the patent. The ordinary and customary meaning of disputed claim language is the meaning that the language would have to a person of ordinary skill in the art in question who is deemed to have read the disputed term or phrase in the context of the entire claim and the entire patent. Philips, 415 F.3d at 1313, 1321 ("Properly viewed, the 'ordinary meaning' of a claim term is its meaning to the ordinary artisan after reading the entire patent."); Medrad, Inc. v. MRI Devices, Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term ... in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.");

Nystrom v. TREX Co., 424 F.3d 1136, 1142 (Fed. Cir. 2005) ("The person of ordinary skill in the

art views the claim term in the light of the entire intrinsic record."); *Maytag Corp. v. Electolux Home Prods., Inc.*, 411 F. Supp. 2d 1008, 1037-38 (N.D. Iowa 2006). Therefore, as the Federal Circuit has succinctly summarized:

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Philips, 415 F.3d at 1316 (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

The court must often consider numerous sources of information to determine the proper construction of a disputed claim term or phrase. "Because the meaning of a claim term *as understood by persons of skill in the art* is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Philips*, 415 F.3d at 1314 (emphasis added) (internal quotations omitted). These sources include, first and foremost, the intrinsic evidence, which consists of the words of the claims, the remainder of the patent specification, and the patent's prosecution history. *Id.*; *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history.").

When helpful, the court may also rely on extrinsic evidence, which consists of all evidence external to the patent and its prosecution history. *Philips*, 415 F.3d at 1317. Extrinsic evidence, however, should not be used to change the meaning of claim language that is apparent from the intrinsic evidence. *Id.* 1319. A claim construction that conflicts with the intrinsic

evidence undermines the notice function of the indisputable public records upon which the public is entitled to rely. *Id*.

A. The Words Of The Claims

Claim construction "begins and ends in all cases with the actual words of the claims." Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998); Vitronics, 90 F.3d at 1582 ("First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention."); Nystrom, 424 F.3d at 1142 ("[W]e begin our claim construction analysis with the words of the claim."). Each word in a claim is presumed to have meaning. Foremost In Packaging Sys. v. Cold Chain Tech., 485 F.3d 1153 (Fed. Cir. 2007); Stumbo v. Eastman Outdoors, Inc., 508 F.3d 1358, 1362 (Fed. Cir. 2007). Importantly, the context in which a disputed claim term is used in an asserted claim can provide substantial guidance as to the meaning of the claim term. *Philips*, 415 F.3d at 1314 (quoting ACTV Inc. v. Walt Disney Co., 346 F.3d 1082, 1088 (Fed. Cir. 2003) ("the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.")). Also, "[b]ecause claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Philips*, 415 F.3d at 1314. "When different words or phrases are used in separate claims, a difference in meaning is presumed." Nystrom, 424 F.3d at 1143.

B. The Patent's Written Description

The words of the claims must be based on the written description in the patent specification. *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985). "The specification is, thus, the primary basis for construing the claims." *Id.* Usually, the specification

is dispositive in the claim construction analysis; "it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "It is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." *Philips*, 415 F.3d at 1317.

The specification may define claim terms expressly or by implication. *Vitronics*, 90 F.3d at 1582; *Bell Atl. Network Servs., Inc. v. Covad Communications Grp., Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001) ("[A] claim term may be clearly redefined without an explicit statement of redefinition."). For example, "when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term 'by implication." *Bell*, 262 F.3d at 1271. Similarly, "a statement in a specification that describes the invention as a whole can support a limiting construction of a claim term." *American Piledriving Equip., Inc. v. Geoguip, Inc.*, 637 F.3d 1324, 1334 (Fed. Cir. 2011).

C. The Patent's Prosecution History

The court should also consider a patent's prosecution history when construing disputed claim language. *Vitronics*, 90 F.3d 1582. The prosecution history is the complete public record of all the proceedings before the United States Patent and Trademark Office, including representations, claim amendments and arguments made by the applicant regarding the scope of the claims. *Vitronics*, 90 F.3d at 1582. The prosecution history also includes the prior art cited during examination of the patent. *Philips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id*.

D. Claim Interpretation Under 35 U.S.C. § 112 ¶ 6

A "means-plus-function" limitation in a patent claim enumerates a function to be performed instead of describing definite, specific structures or materials for performing the function within the claim itself. 35 U.S.C. \$ 112 \P 6 (2006). The relevant statute, 35 U.S.C. \$ 112 \P 6, states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Id. If a claim limitation uses the term "means," there is a rebuttable presumption that the relevant claim term is a means-plus-function element, and that 35 U.S.C. § 112 ¶ 6 applies to the claim. Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP, 616 F.3d 1249, 1262 (Fed. Cir. 2010) (citing Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1364 (Fed. Cir. 2000)). This presumption can be rebutted if the claim recites sufficient structure to perform the claimed function. Id.

A means-plus-function element must be construed to cover the structure described in the specification for performing the function, as well as any equivalents thereof. 35 U.S.C. § 112 ¶ 6. In order to literally infringe a means-plus-function claim limitation, the accused device must include a structure that carries out the identical function to that recited in the claim, and the structure must be identical to or equivalent to the corresponding structure disclosed in the patent specification. *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1320 (Fed. Cir. 2003). The meaning of the words used to describe the claimed function are construed using ordinary principles of claim construction. *Id.* at 1319.

In return for use of the means-plus-function claim format, the patentee must clearly link in the specification the claimed function to particular structure that performs the function.

Medical Instrumentation and Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1211 (Fed. Cir. 2003) ("The duty of a patentee to clearly link or associate structure with the claimed function is the *quid pro quo* for allowing the patentee to express the claim in terms of function under section 112, paragraph 6."). Failure to disclose the corresponding structure in such a manner that one of skill in the art would know and understand what structure corresponds to the means limitation, renders the claim invalid for indefiniteness. *Biomedino, LLC v. Waters Tech. Corp.*, 490 F.3d 946, 949-50 (Fed. Cir. 2007) (affirming invalidity of a means-plus-function claim for failure to clearly link corresponding structure in the specification).

III. OVERVIEW OF THE '984 PATENT

The asserted '984 patent is entitled "ADJUSTABLE PRICE FUEL DISPENSING SYSTEM." As admitted in the Background section of the '984 patent, loyalty reward programs that provided targeted discounts to customers based on the customers' prior purchases were already well known as of the filing date of the '984 patent application. ['984 Patent, Doc# 45-2, col 1, ln 59 – 67]. The '984 patent further contends, however, that such programs had not been expanded to include fuel dispensing systems because conventional fuel dispensing systems did not include an external interface to allow the fuel price at the pump to be dynamically adjusted by the fuel merchant. [*Id.* at col 1, ln 59 – col 2, ln 11]. The '984 patent purported to address that need; "The present invention couples a customer reward data processing system with a fuel dispensing apparatus to allow a retailer to authorize discounted fuel or other marketing promotions in accordance with a customer's achievement of predefined purchasing criteria." [*Id.* at col. 2, ln 12-25].

Under the heading "SUMMARY OF THE INVENTION," the '984 patent describes a data processing system that will "track the customer purchases and compare them with a

predefined criteria to determine when a fuel discount is to be provided." [*Id.* at col 2, ln 26-36]. When the customer achieves a predefined purchasing criteria, the reward system authorizes a fuel discount and provides the customer with a mechanism to obtain the discounted fuel, such as a bar coded receipt or an identification number. [*Id.* at col 2, ln 37-46]. The customer may then scan the receipt or enter the identification code at the pump. Before dispensing fuel, the pump controller adjusts the price-per-unit on the pump display by subtracting the awarded price-per-unit discount from the original price-per-unit. [*Id.* at col 2, ln 47-57].

Fig. 8 of the '984 patent, which is reproduced below, provides a block diagram of the components of a preferred embodiment. [*Id.* at col 8, ln 5-7]. The system generally consists of a retail store point of sale terminal (200) for scanning an item to be purchased (201), a database (206) that maintains customer purchasing records (208), and a fuel pump (112), which is connected to the database (206) through a server (204). [*Id.* at col 8, ln 5-62].

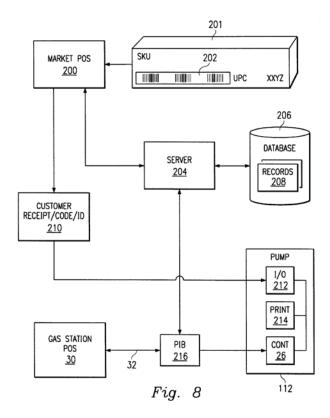
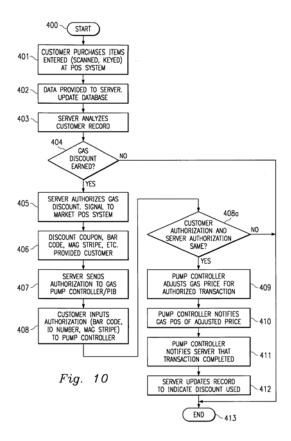


Fig. 10, which is also reproduced below, shows a flowchart of the process steps carried out by "the present invention." [*Id.* at col 10, ln 38-40]. In step 401 the customer purchases one or more products at the point of sale terminal (200). [*Id.* at col 10, ln 41-44]. In steps 402 and 403 data relating to the customer's purchase is supplied to the database (206) to update the customer's record (208). [*Id.* at col 10, ln 44-52]. In step 404 the reward system examines the customer's record and "a determination is made as to whether the current purchases will cause a fuel discount to be offered." [*Id.* at col 10, ln 53-59]. If a discount has been earned, then the customer is provided with a mechanism to receive the discount at step 406. [*Id.* at col 10, ln 62-67]. In step 408 the customer presents a bar code, identification, or other authorization code at the pump (112) to receive the discount. [*Id.* at col 11, ln 4-8]. At step 409 the pump controller adjusts the price per unit of fuel to be dispensed by subtracting the awarded price per unit discount from the originally displayed price. [*Id.* at col 11, ln 8-13].



The '984 patent includes only two independent claims which are nearly identical. Claim 1, for example, recites:

A system for dispensing fuel, comprising:

a nozzle for dispensing the fuel;

a controller in communication with the nozzle for selectively causing the nozzle to dispense the fuel at a discounted unit price;

a reader connected to the controller for reading data provided by a user and transferring the data to the controller; and

<u>a database for creating and maintaining a record associated with purchases made</u> by the user, the record including the users achievement of a purchasing criteria;

whereby upon receipt of the data, the controller accesses said record and causes the nozzle to dispense the fuel at the discounted unit price associated with the users achievement of the purchasing criteria.

[*Id.* at col 12, ln 31-47 (emphasis added)]. Claim 14 is the same but requires the user to provide "identification data" rather than simply "data." [*Id.* at col 14, ln 1-19].

IV. DISPUTED CLAIM LANGUAGE OF THE '984 PATENT

1. a record associated with purchases made by the user, the record including the users achievement of a purchasing criteria

This limitation from claims 1 and 14 of the '984 patent needs to be construed because it details a particular database record structure that a system must use in order to infringe upon the claim. It is not sufficient for a database to include just any record associated with purchases made by the user. The record must include "the users achievement of a purchasing criteria," consistent with the exemplary customer record that is shown and described in the specification of the '984 patent.

Kroger contends that the disputed claim language means "a record associated with fuel or non-fuel purchases made by the user, the record including a determination that the user

is entitled to a discounted unit price based on a comparison of the user's purchases to predefined purchasing criteria." This construction is consistent with the plain meaning of the claim language and is supported by the written description and figures in the '984 patent.

The system described by the '984 patent determines whether a user has achieved a purchasing criteria by comparing the customer's purchases with predefined criteria. If the purchasing criteria has been achieved, the system updates the customer's record to reflect that achievement and provides the customer with a fuel discount that the customer can later redeem. For example, under the heading "SUMMARY OF THE INVENTION," the '984 patent states:

The reward system will track the customer purchases and compare them with a predefined criteria to determine when a fuel discount is to be provided When a customer meets one of the predefined criteria, the reward system will authorize a fuel discount reward and provide the customer with a mechanism to obtain the discounted fuel.

[*Id.* at col 2, ln 20-67]. Fig. 10 of the '984 patent is specified as "showing the process implemented by the present invention." The '984 patent describes Fig. 10 by stating:

[D]ata relating to [] purchased items is [] provided by POS 200 to server 204, at step 402. Server 204 then analyzes the customer record (step 403). That is, server 204 will create a record for a new customer or maintain an existing record by updating it with current purchases for customers already having a record. At step 404 a determination is made as to whether the current purchases will cause a fuel discount to be offered. As noted above this step may include determining if the customer has purchased certain designated items that will trigger a discount, whether a total dollar value spent exceeds a predefined threshold and/or if a total quantity of items exceeds a threshold.

[*Id.* at col 10, ln 38-59]. The written description of the '984 patent, therefore, confirms that "the invention" includes a determination that the customer is entitled to a fuel discount based on a comparison of the customer's purchases to predefined criteria.

As is also required by the claim language at issue, and as described in the specification, the outcome of the determination that the customer has achieved the criteria is recorded in the

customer record. For example, Fig. 9 of the '984 patent shows "an example of a record that could be used to track customer eligibility for fuel discount rewards in accordance with the present invention." [*Id.* at col 3, ln 28-30]. Field 310 of the sample customer record includes "data representing the availability of a fuel discount." [*Id.* at col 9, ln 45-46]. Thus, the record includes a field having a positive indication that a determination has been made that the customer is entitled to a fuel discount reward based on a comparison of the customer's purchases to predefined purchasing criteria. This is the only example of a customer record that the '984 patent shows.

Fig. 9 of the '984 patent, which is reproduced below, also provides a detailed example of a particular customer's purchasing history.

				Fig.	9		
300~	- SMITH, A	II.	D NO. 1234	1ABC			
	DATE	PURCHASES	QUANTITY OF DESIGNATED ITEMS (PROMO)	TOTAL QUANTITY (LOYALTY)	DISCOUNT	DISCOUNT USED	DISCOUNT AMOUNT
	<u>302</u>	<u>304</u>	<u>306</u>	<u>308</u>	<u>310</u>	<u>312</u>	<u>314</u>
	1/5/99	20\$	3	5	N		
	1/17/99	15\$	5	10	Y (≧5 PROMO)	1/20/99	10¢/GAL
	1/28/99	45 \$	2	4	N		
	2/4/99	25\$	1	3	Y (>20 LOY) Y (>100\$)		10¢/GAL] 25¢/GAL 15¢/GAL] 25¢/GAL
208~							
	TOTAL	\$105	11	22			
		316	318	320			

The specification describes the exemplary purchasing history as follows:

As an example, when A. Smith purchases \$20 of merchandise on Jan. 5, 1999, record 208 is created by server 204 and stored in database 206. At that time three (3) designated items were purchased out of a total quantity of five (5) items. These purchases did not meet the established criteria that would cause a discount on fuel to be made available.

Then, on Jan. 17, 1999, A. Smith purchased five designated items, 10 total items for \$15.00. This purchase will cause the total designated item purchase by this customer to exceed five and cause a fuel discount to be offered. *Thus, field 310 will indicate that a fuel discount was offered to A. Smith on Jan. 17, 1999.* The discount amount is noted as \$0.10 per gallon in field 314. As noted above, the mechanism by which the discount is offered may be a receipt with a bar code, updated magnetic card, alphanumeric authorization code, or the like.

Further, record 208 shows that this customer took advantage of the discount and used it to purchase fuel on Jan. 20, 1999. It will be understood that this data can then be analyzed to determine the success of the discount program. That is, the predefined purchase criteria can be adjusted as needed to provide the discount for different items, different quantities of the items or a different discount amount.

Returning to the current example, A. Smith returns to the associated store and purchases additional items on Jan. 28, 1999, totaling \$45.00. However, at this time A. Smith has not reached the next purchasing criteria threshold that will cause discounted fuel to be offered.

On Feb. 4, 1999, A. Smith once again purchases items from this, or another participating store. This purchase causes the total purchases to exceed \$100.00. Also, A. Smith purchased three total items that caused the total quantity of merchandise purchased at this store to be greater than 20 items. In this example, exceeding both of these criteria will trigger a fuel discount. That is, purchasing greater than 20 items within a month will cause a \$0.10 fuel discount to be offered and exceeding \$100.00 in total purchase price will cause a \$0.15 fuel discount. Those skilled in the art will understand that the fuel discount system of the present invention can be designed to offer the highest discount of the two, e.g. \$0.15 per gallon, the lowest discount \$0.10, an average of the two, or add the discounts and offer a \$0.25 per gallon discount to the customer. In any event, it can be seen that information provided in record 208 can be used to monitor a customers status relative to being offered discounted fuel and to determine when such offer is to be made to the customer.

[*Id.* at col 9, ln 52 – col 10, ln 31 (emphasis added)]. Thus, Fig. 9 and the corresponding description disclose a process in which (1) the customer's purchases are compared to predefined purchasing criteria, and (2) if the purchases satisfy the criteria, then the customer's entitlement to

a discount is recorded in the record of the customer's purchases. The description explicitly states that the data in the record can be used to "monitor a customers status relative to being offered discounted fuel." [*Id.* at col 10, ln 29-30].

The specification of the '984 patent, which is the best indicator of what the inventors actually invented, confirms the plain and ordinary meaning of the claims. The disputed claim language does not merely require "a record associated with purchases made by the user" from which achievement of a purchasing criteria *can be determined*. The claim language goes on to further require "the record including the users achievement of a purchasing criteria." This additional claim language is presumed to have meaning and should not be construed in a manner that would render it superfluous. *Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007). The "achievement" of a purchasing criteria cannot be recorded as an historical fact in a "record" unless and until a determination has first been made that the user has satisfied (i.e., achieved) the predefined purchasing criteria.

Accordingly, Kroger contends that the disputed claim language means "a record associated with fuel or non-fuel purchases made by the user, the record including a determination that the user is entitled to a discounted unit price based on a comparison of the user's purchases to predefined purchasing criteria."

V. OVERVIEW OF THE '128 PATENT

Under the heading "BACKGROUND OF THE INVENTION," the asserted '128 patent acknowledges that it is was previously known for product vendors¹ to enter into cross-marketing agreements in which the purchase of a product from a first vendor earned a discount on a product

¹ As defined in the '128 patent, the term "vendor" refers to the manufacturer of a specific product, not the store where the product is purchased. [*Id.* at col 1, ln 23-28]. As defined in the prosecution history of the '128 patent, the term "merchant" is the store where the customer purchases a product, not the manufacturer of the product. ['128 Prosecution History, Doc# 45-7, PageID# 1653].

from a second vendor. ['128 Patent, Doc# 45-4, PageID# 1509, col 1, ln 20-23]. The '128 patent contends, however, that existing systems and methods for providing cross-marketing discounts had not been extended to provide *price-per-unit discounts* on products such as gasoline, which are sold by the gallon. [*Id.* at col 1, ln 34-37]. Nor, according to the '128 patent, had existing systems and methods offered variable discounts that increase if a customer purchases more than one cross-marketed product from the same or different vendors. [*Id.* at col 1, ln 37-41]. Accordingly, the '128 patent contends: "In order to overcome the disadvantage of existing solutions, it would be advantageous to have a method ... which allows the application of multiple level discounts to the price per gallon of gasoline based on the number of cross-marketed products purchased. The present invention provides such a method." [*Id.* at col 2, ln 30-37].

The '128 patent is directed to a system and method for providing a product-specific, price-per-unit discount on fuel in response to the purchase of a predetermined product that is being cross-marketed.² For example, if a customer buys a two liter bottle of Coke, the customer may receive a two cents per gallon discount on fuel. In addition, the '128 patent discloses that the customer may earn multiple price-per-unit discounts for the purchase of multiple products in the same or different store visits, all of which can be added together for a total price-per-unit discount on fuel. So, if a customer also purchases a bottle of Tide detergent, the customer may receive a three cents per gallon discount on fuel, which is added to the two cents per gallon discount associated with Coke for a five cents per gallon total discount. Once the customer purchases gasoline, the total value of the discount redeemed is determined and can then be

² The '128 patent suggests that the award of fuel discounts is tied to the purchase of specific products pursuant to the terms of cross-marketing agreements. For example, the written description states that by analyzing data from discounts issued and discounts redeemed under the invention, it is possible to "determine the effectiveness of cross-marketing agreements on various products." ['128 Patent, Doc# 45-4, col 6, ln 57-61].

allocated to the vendors (i.e., manufacturers) of the individual cross-marketed products, the purchase of which resulted in the fuel discount. [*Id.* at Abstract].

VI. DISPUTED CLAIM LANGUAGE OF THE '128 PATENT

Independent claims 1 and 20 of the '128 patent are asserted as being infringed. Both claims are reproduced below with the disputed claim language highlighted in bold.

1. A method of providing multiple level discounts on a price-per-unit (PPU) of a consumable good sold in multiple units to a customer who purchases a plurality of cross-marketed products, said method comprising the steps of:

awarding a first discount on the PPU of the consumable good to the customer in response to a purchase by the customer of a first cross-marketed product;

awarding a second discount on the PPU of the consumable good to the customer in response to a purchase by the customer of a second cross-marketed product;

adding the first discount to the second discount to determine a total discount on the PPU of the consumable good; and

awarding the total discount to the customer.

20. A system for providing multiple level discounts on a price-per-unit (PPU) of a consumable good sold in multiple units to a customer who purchases a plurality of cross-marketed products, said system comprising:

a discounts issued database for storing discounts;

means for calculating a first discount on the PPU of the consumable good in response to a purchase by a customer of a first cross-marketed product;

means for calculating a second discount on the PPU of the consumable good in response to a purchase by the customer of a second cross-marketed product; and

a database controller which adds the first discount to the second discount to determine a total discount for the customer on the PPU of the consumable good.

['128 Patent, Doc# 45-4, col 8, ln 58 – col 9, ln 4, col 12, ln 36-50]. Dependent claims 2, 3, 4, 21, 22, and 23 are also asserted as being infringed. Each disputed claim term or phrase is addressed separately below.

1. awarding a first discount on the PPU of the consumable good to the customer in response to a purchase by the customer of a first cross-marketed product

This disputed claim language from claim 1 of the '128 was amended during prosecution in order to distinguish the claimed invention over cited art and therefore requires a construction that is consistent with the basis for the asserted distinction. The parties dispute the meaning and scope of the claim language above in at least two important respects. First, the parties dispute what it means to award a discount "in response to a purchase by the customer of a first crossmarketed product." Kroger contends that the awarded discount must be product-specific (i.e., given in exchange for the purchase of a predetermined product that is being marketed) such as two cents per gallon off for purchasing a box of Cheerios or three cents per gallon off for purchasing a gallon of milk. Second, the parties dispute the meaning of a "discount on the PPU of the consumable good." Kroger contends that a discount on the PPU is a reduction in a specified monetary amount on the price per unit of the consumable good – not merely a representation of an unspecified reduction as Excentus contends. Accordingly, Kroger contends that the disputed claim language means "awarding a first product-specific reduction in a specified monetary amount on the price per unit of the consumable good to the customer in exchange for a purchase by the customer of a first predetermined product being marketed."

a. The first discount is a product-specific discount awarded in exchange for the purchase of a predetermined product

The written description of the '128 patent, which is the best indicator of what the inventor actually invented, first states:

It would be desirable to gasoline vendors to have a method which would allow the application of varying discounts to the price per gallon based on the number of cross-marketed products purchased. For example, if the gasoline vendor had a cross-marketing agreement with various vendors of products sold by a HVR merchant, the purchase of Product A could result in a discount in the price of the gasoline of \$0.02 per gallon. Likewise, the purchase of Product B could result in a discount in the price of the gasoline of \$0.02 per gallon. If the consumer buys both products, it would be desirable to discount the price of the gasoline by \$0.04 per gallon. Existing systems and methods do not perform this function.

. . . .

... In order to overcome the disadvantage of existing solutions, it would be advantageous to have a method ... which allows the application of multiple level discounts to the price per gallon of gasoline based on the number of crossmarketed products purchased. *The present invention provides such a method*.

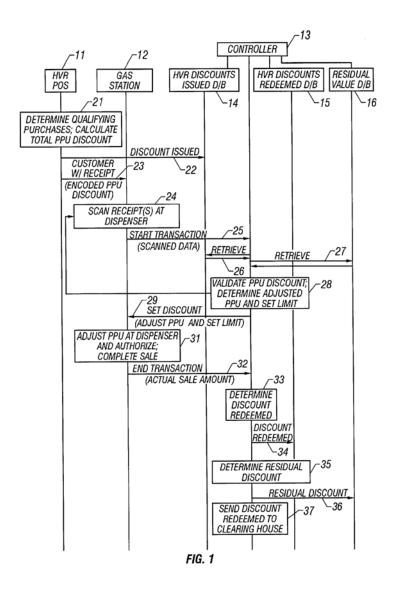
[*Id.* at col 1, ln 57 – col 2, ln 5, 30-37 (emphasis added)]. Under the heading DETAILED DESCRIPTION, the specification further states:

The present invention is a method of utilizing electronic coupons for cross-marketing. By making a purchase of one or more products, a customer earns discount credits toward the purchase of another product such as gasoline. For example, if the customer buys Product A from a HVR merchant such as a grocery store or convenience store, she may earn a Price Per Unit (PPU) discount of \$0.02/gallon on her next purchase of gasoline at a participating gas station....

The PPU price on the gasoline dispenser can be discounted to multiple levels, depending on the discount which the customer has earned. For example, if the customer also bought Product B which provides a gasoline discount of \$0.02/gallon, in addition to Product A, then the system automatically adds the two discounts together to calculate a total discount. Thus, when the customer scans in her receipt and purchases gasoline, she receives a PPU discount of \$0.04/gallon.

[*Id.* at col 3, ln 55 – col 4, ln 14 (emphasis added)].

Fig. 1 of the '128 patent, which is reproduced below, is described as illustrating "the present invention." [*Id.* at col 5, ln 14-66].



With respect to Fig. 1, the written description states: "When a customer purchases items from the HVR merchant, the HVR POS terminal 11 determines at 21 which purchases qualify for a price-per-unit (PPU) discount on gasoline. A total PPU discount is then calculated by adding each individual PPU discount for which the customer has qualified." [*Id.* at col 5, ln 14-26]. At the conclusion of a purchase transaction the POS terminal may print a receipt that is treated as a legal tender coupon. [*Id.* at col 5, ln 32-36, col 3, ln 58-67]. The customer may scan more than one receipt at the fuel dispenser and the price per unit discount associated with each receipt is added to the total PPU discount. [*Id.* at col 6, ln 33-36].

Thus, each of these descriptions from the '128 patent makes it clear that the process described as "the invention" evaluates the identity of each product purchased by the customer and awards a product-specific price per unit discount for each product identified as a predetermined cross-marketed product. ³ The purchase of just a single product results in the award of a discount if the product is identified as a predetermined cross-marketed product.

This interpretation is consistent with positions taken by the applicant in the prosecution history. During prosecution of the '128 patent application, the Examiner rejected pending claim 1 over prior art U.S. Patent No. 5,173,851 to Off ("Off"). Off generally discloses a system in which the printing of a discount coupon is conditioned on the purchase of multiple triggering products that may not be related in any way. In response to the rejection, the applicant argued:

Off teaches that the customer will receive a discount on a particular product *if and only if* the customer purchases at least two independent cross-marketed products. Thus, Off teaches that *no* discount is awarded unless *both* cross-marketed products are purchased. This teaches away from the Applicant's claimed invention.

['128 Prosecution History, Doc# 45-7, PageID# 1654 (emphasis in original)]. These comments confirm Kroger's understanding that the claimed invention awards a product-specific discount in exchange for the purchase of a single predetermined product that is being marketed.⁴

The argument did not persuade the Examiner, so the applicant amended the relevant claim language from awarding a first discount "based on" the purchase of a first cross-marketed product to awarding a first discount "in response to" the purchase of a first cross-marketed product. ['128 Prosecution History, Doc# 45-7, PageID# 1699]. In contemporaneous remarks

³ The '128 patent distinguishes between product-specific discounts and discounts that "are not product-specific," such as a ten cents per gallon discount for purchasing one hundred dollars of groceries in a single visit. ['128 Patent, Doc# 45-4, col 4, ln 15-25]. These non product-specific discounts are not the subject of the disputed claim language.

⁴ Kroger also notes that the applicant referred interchangeably to cross-marketed products and "triggering products" during prosecution. ['128 Prosecution History, Doc# 45-7, PageID# 1653 ("[I]t is impossible for the two triggering (cross-marketed) products to have come from different merchants.")].

the applicant stated: "An ... amendment has been made to recite that each discount is awarded *in response to* (rather than "based on") a purchase by the customer of a first cross-marketed product. Applicant feels this is a more precise recitation of his method." ['128 Prosecution History, Doc# 45-7, PageID# 1707-08 (emphasis in original)]. Kroger believes that the amended claim language "in response to" is narrower than the original language "based on." Kroger further believes that awarding a discount "in response to" the purchase of "a first cross-marketed product [(singular)]" means that there is a one to one correspondence between the purchase and the award. That is, the award of the first discount is made in exchange for the purchase of the first cross-marketed product, not for some other reason.

b. The first discount on the PPU is a reduction in a specified monetary amount

As the phrase is used consistently throughout the written description of the '128 patent, a "discount on the PPU" (also referred to as a "PPU discount") is a reduction in a specified monetary amount on the price per unit (e.g., ten cents off per gallon). In column 3 the '128 patent refers to "a Price Per Unit (PPU) discount of \$0.02/gallon." ['128 Patent, Doc# 45-4, col 3, ln 61]. Likewise, in column 4 the '128 patent refers to "a PPU discount of \$0.04/gallon." [*Id.* at col 4, ln 13-14]. With reference to Fig. 2, the '128 patent states that field 5 "shows the PPU discount issued in cents per fuel-unit volume (for example, 0.15/gallon)." [*Id.* at col 5, ln 57-59].

Even more importantly, the '128 patent also describes using a "PPU discount" in a manner in which it can only be a reduction in a specified monetary amount – not merely a representation of an unspecified reduction. For example, the specification of the '128 patent describes "subtracting the total PPU discount from the normal price" to determine the adjusted price per unit for displaying on a fuel dispenser. [*Id.* at col 6, ln 28-39]. Similarly, with reference to Fig. 3A, the specification of the '128 patent states:

At 46, it is determined whether or not the calculated total PPU discount is greater than the PPU displayed on the gasoline dispenser. If not, the method moves to step 47 and subtracts the total PPU discount from the displayed PPU and then displays a new discounted PPU on the dispenser at 48.

[*Id.* at col 7, ln 21-26]. In addition, the specification states that "the value of the discount redeemed is determined by multiplying the PPU discount by the number of gallons purchased." [*Id.* at col 8, ln 5-7]. In each case, the PPU discount must be a reduction in a specified monetary amount (e.g., 20 cents off per gallon) to carry out the described arithmetic operation.

If, as Excentus contends, the PPU discount was merely a representation of a reduction, such as reduction representation "A," then the above-described arithmetic operations would not make sense. For example, a posted price of \$3.00/gallon minus reduction representation A does not produce a new adjusted price per gallon. Similarly, the value of a redeemed discount cannot be determined, as described in the '128 patent, by multiplying reduction representation A by the number of gallons purchased.

Nor is the claimed "first discount on the PPU" an amount of reward points. For example, if a customer is awarded 10 points for a first purchase and 25 points for a second purchase for a total of 35 points, an adjusted price per unit of fuel cannot be calculated, as described in the '128 patent, by subtracting 35 points from the normal price. Nor can the value of any discount redeemed be determined by multiplying 35 points by the number of gallons purchased.

The phrase "discount on the PPU" is defined by implication in the specification of the '128 patent. The written description and claims always uses the phrase and its counterpart "PPU discount" in manner consistent with the discount being a reduction in a specified monetary amount on the price per unit. By contrast, Excentus's proposed construction is inconsistent with the use of the disputed claim language in the written description and claims.

Furthermore, construing "PPU discount" in a manner that would enable the patentee to argue that the term encompasses reward points would also be inconsistent with other uses of that phrase by Excentus and the inventor of the '128 patent, Randy Nicholson. For example, Nicholson is also identified as a co-inventor of U.S. Patent No. 7,742,942, which is also assigned to Excentus and which is addressed below. That patent teaches that reward points are "exchanged for," "redeemed for," or "converted to" a PPU discount on fuel. ['942 Patent, Doc# 45-11, PageID# 1994, col 6, ln 1-18]. Thus, reward points are not a PPU discount. Common sense suggests that common language in patents with common inventors, common subject matter, and common assignees is used consistently. But regardless, the manner in which the disputed claim language is used in the '942 patent simply confirms the construction already determined independently from the '128 patent. Points are not a price per unit discount. A discount on the price per unit is a reduction in a specified monetary amount on the price per unit.

Again, for all of the reasons previously stated, Kroger contends that the disputed claim language means "awarding a first product-specific reduction in a specified monetary amount on the price per unit of the consumable good to the customer in exchange for a purchase by the customer of a first predetermined product being marketed."

2. awarding a second discount on the PPU of the consumable good to the customer in response to a purchase by the customer of a second cross-marketed product

This disputed claim language from claim 1 of the '984 patent is identical to the immediately preceding limitation addressed above except for substitution of the word "second" for the word "first." For all of the reasons stated with respect to the immediately preceding limitation, Kroger contends that the disputed claim language means "awarding a second product-specific reduction in a specified monetary amount on the price per unit of the

consumable good to the customer in exchange for a purchase by the customer of a second predetermined product being marketed."

3. discount

Kroger believes that the term discount, although disputed, should not be construed outside of the context of the surrounding claim language. When considered in context, and for the reasons stated above in section VI.1, Kroger contends that the claim term "discount" means "reduction in a specified monetary amount."

4. second merchant

This disputed claim language appears in dependent claim 2 of the '984 patent and should be construed in a manner consistent with the specification's reasoning for discussing different merchants. Claim 2 recites: "The method of providing multiple level discounts of claim 1 wherein the customer purchases the first cross-marketed product from a first merchant, and purchases the second cross-marketed product from a *second merchant*." ['128 Patent, Doc# 45-4, col 9, ln 5-8 (emphasis added)]. Kroger contends that the first and second merchants must be independent – not simply two stores under common ownership or management.

During prosecution of the patent, the applicant argued with respect to claim 2 that "[t]he 'merchant' is the store where the customer is shopping." ['128 Prosecution History, Doc# 45-7, PageID# 1653]. The written description of the '128 patent states that when a customer buys a cross-marketed product from a merchant, the customer may earn a price per unit discount on fuel, which may be encoded on the customer's receipt from the merchant. ['128 Patent, Doc# 45-4, col 3, ln 55-67]. The written description further states that the customer may scan multiple receipts at a fuel pump to receive a cumulative discount where "[t]he receipts may be from several visits to a single HVR merchant, or may be from *multiple independent HVR merchants*."

[*Id.* at col 4, ln 33-37 (emphasis added)]. Dependant claim 2 is directed to the embodiment in which the receipts are from multiple independent merchants.

Based on the foregoing, Kroger contends that the disputed claim language means "merchant that is distinct and independent from the first merchant."

5. coupon providing a unique customer identification and unique discount identification

This disputed claim language appears in dependent claims 4 and 23 of the '128 patent. Claim 4 recites in pertinent part "issuing an electronic coupon to the customer, said *coupon providing a unique customer identification and a unique discount identification.*" [*Id.*, at col 9, ln 15-17 (emphasis added)]. Claim 23 recites "a point of sale (POS) terminal that determines the first discount and issues an electronic coupon to the customer, said *coupon providing a unique customer identification and a unique discount identification.*" [*Id.*, at col 13, ln 5-11 (emphasis added)]. The language needs to be construed because during prosecution the patentee argued that the use of both of the stated identifications was critical to the supposed success of the patentee's system. Kroger contends that the claim language requires that the customer receive a coupon for redemption that includes two distinct pieces of identifying information that together tie the coupon to both a record of a discount awarded and the customer carrying the coupon.

The specification of the '128 patent describes that a qualifying customer receives a coupon, which may be a bar coded receipt, that is later presented at a participating fuel dispenser to receive a price per gallon discount. [*Id.* at Abstract, Fig. 1 (ref.# 23, 24), col 3, ln 55-67]. The coupon includes both "an encoded customer identification and a transaction identification associated with the discount." [*Id.* at col 5, ln 32-35, Fig. 2 (field #1), col 7, ln 9-11 ("information scanned from the bar code, which includes the discount reference number, a customer identification, and a transaction identification.")].

During prosecution of the '128 patent application, the inventor submitted an affidavit in support of patentability stating, "My invention, which associates the discount award with unique customer and discount identifications, reduced the incidence of fraud to *zero*." ['128 Prosecution History, Doc# 45-7, PageID# 1641]. Additionally, with respect to application claim 5, which issued as dependent claim 4, the applicant argued:

[C]laims 5 and 6 have been amended to clarify that the customer identification and discount identification are numbers that are unique to a particular customer and transaction.... [T]he verification of these unique numbers at the time of redemption is an important feature that has contributed to the surprising results in eliminating misredemptions and fraud. There is no suggestion in [the cited prior art] of tying a particular coupon to a particular customer in order to reduce misredemptions and fraud.

[*Id.* at PageID# 1655].

Based on the foregoing, Kroger contends that the disputed claim language means "coupon that includes both a unique number that identifies a particular customer and a unique number that identifies a specific discount awarded to the particular customer."

6. storing the total discount in a discounts issued database which associates the total discount with the unique customer identification and discount identification

The disputed claim language appears in claim 4, which ultimately depends from claim 1. Claim 1 recites the steps of awarding a first discount on the PPU, awarding a second discount on the PPU, and adding the first discount to the second discount to determine a total discount on the PPU. As previously discussed in section VI.1.b above, a "discount on the PPU" is a reduction in a specified monetary amount on the price per unit. Claim 4 thus requires storing in a discounts issued database the total reduction in a specified monetary amount on the price per unit and associating the specified monetary amount with a unique customer identification and a unique discount identification.

Fig. 1 of the '128 patent discloses a discounts issued database (14) that stores discounts awarded to a customer for later retrieval and redemption. ['128 Patent, Doc# 45-4, Fig. 1 (ref # 14, 21, 22, 24, 26), Abstract, col 5, ln 14-29, col 6, ln 15-21]. The database includes customer and transaction information for matching a customer's bar coded receipt (i.e., coupon) with a particular discount record. [*Id.* at col 5, ln 37-42, col 2, ln 58-61 ("A discount amount is stored in a discounts issued database which associates the discount amount with the customer identification and the transaction identification.")]. Fig. 3A shows that when the customer scans his or her receipt at the pump, the scanned information, which includes a discount reference number, a customer identification, and a transaction identification, is used to retrieve the issued discount from the discounts issued database (14). [*Id.* at col 7, ln 7-13].

During prosecution, the disputed claim language, which appeared in application claim 5, was amended to include the underlined language below:

storing the total discount in a discounts issued database which associates the total discount with the <u>unique customer identification and</u> discount identification.

['128 Prosecution History, Doc# 45-7, PageID# 1667]. In contemporaneous remarks the applicant stated: "claim 5 ... recites that the unique customer identification and the discount identification are associated with the total PPU discount in the discounts issued database. Thus, the value that is stored in the database is unique to a particular customer." ['128 Prosecution History, Doc# 45-7, PageID# 1656 (emphasis added)].

Based on the foregoing, Kroger contends that the disputed claim language means "storing the total discount in a database that matches, for later redemption, the total discount with the unique customer identification and discount identification."

7. a discounts issued database for storing discounts

This disputed language from independent claim 20 of the '128 patent is important because it reflects the intended scope of the claimed system, specifically one in which particular discounts are issued and stored in a database for later redemption by the customer. The '128 teaches that a point of sale terminal (11) issues discounts (22) that are stored in a discounts issued database (14). ['128 Patent, Doc# 45-4, Fig.1, col 2, ln 53-61, col 5, ln 20-28]. When the customer later scans identifying information at the fuel pump, such as a bar coded receipt (24), the stored discounts are retrieved (26) for redemption. [*Id.* at col 2, ln 61-65, col 6, ln 15-21]. As discussed in detail in sections VI.1.b and VI.3 above, the claim term "discount," means a reduction in a specified monetary amount – not merely a representation of a reduction.

Based on the foregoing, Kroger contends that the disputed claim language means "a database for storing reductions in specified monetary amounts issued to customers for later redemption."

8. means for calculating a first discount on the PPU of the consumable good in response to a purchase by a customer of a first cross-marketed product

The disputed claim language, which is drafted in means-plus-function format, appears in independent claim 20 of the '128 patent. With one notable exception discussed below, Kroger contends that the recited function of the disputed claim language should be construed consistently with the nearly identical claim language in the method step of claim 1 addressed in Section VI.1 above. However, claim 20 requires a separate construction because the difference between the function language recited in claim 20 and the method step language recited in claim 1 must be taken into account.

⁵ Claim 20 was prosecuted as application claim 21 in the '128 patent application. During prosecution the applicant stated "Claim 21 is a system claim corresponding to method claim 1." ['128 Prosection History, Doc# 45-7, PageID# 1706]. Similarly, the applicant argued "Claims 21-28 recite a system that performs the method recited in claims 1-20. Therefore, the arguments [] relating to the allowability of claims 1-20 are also applicable to claims 21-28." ['128 Prosecution History, Doc# 45-7, PageID# 1662].

Whereas claim 1 recites the step of "awarding a first discount," the disputed claim language addressed here recites "means for calculating a first discount." The claim term "calculating" has meaning and should not be ignored. "When different words or phrases are used in separate claims, a difference in meaning is presumed." Nystrom, 424 F.3d at 1143. The term calculating suggests that a mathematical operation in being performed rather than merely looking up an applicable discount from a table. This understanding is consistent with the written description.

During a single purchase transaction the point of sale terminal (11) of Fig. 1 of the '128 patent performs the step (21) of "DETERMINE QUALIFYING PURCHASES; CALCULATE TOTAL PPU DISCOUNT." The written description states: "When a customer purchases items from the HVR merchant, the HVR POS terminal 11 determines at 21 which purchases qualify for a price-per-unit (PPU) discount on gasoline. A total PPU discount is then calculated by adding each individual PPU discount for which the customer has qualified." ['128 Patent, Doc# 45-4, col 5, ln 21-26]. Similarly, the specification states:

The PPU price on the gasoline dispenser can be discounted to multiple levels, depending on the discount which the customer has earned. For example, if the customer also bought Product B which provides a gasoline discount of \$0.02/gallon, in addition to product A, then the system automatically adds the two discounts together to calculate a total discount.

[*Id.* at col 4, ln 6-12]. The customer may be given a receipt at the conclusion of a first purchase transaction that includes a cumulative discount based on multiple qualifying purchases. [*Id.* at col 4, ln 12-14, col 5, ln 23-36]. This process can be repeated in multiple purchase transactions and the customer can present multiple receipts at the pump to receive a total discount on the price per unit of fuel. [*Id.* at col 6, ln 33-36, Fig. 1 (ref# 24, 28)].

Thus, as described and shown in Fig. 1 of the '128 patent, a first POS terminal (11) will award a customer with a product-specific PPU discount in response to the purchase of a qualifying product. If the customer also buys a second qualifying product in the same transaction, the POS terminal will award another product-specific PPU discount and perform a calculation by adding the two product-specific PPU discounts in order to issue to the customer a cumulative PPU discount for the first transaction. The customer may collect multiple receipts from multiple purchase transactions, all of which can be redeemed for a total PPU discount at the pump.

Based on the foregoing, and consistent with the construction previously provided in Section VI.1 above, Kroger contends that the disputed claim language means "an in-store point of sale controller that operates in a first transaction to award a first product-specific reduction in a specified monetary amount on the price per unit of the consumable good to the customer in exchange for a purchase by the customer of a first predetermined product being marketed and then adds the first product-specific reduction to another reduction amount."

9. means for calculating a second discount on the PPU of the consumable good in response to a purchase by a customer of a second cross-marketed product

The disputed claim language, which also appears in claim 20 of the '128 patent, is identical to the immediately preceding limitation except for substitution of the word "second" for the word "first." For all of the reasons stated above in Section VI.8, Kroger contends that the disputed claim language means "an in-store point of sale controller that operates in a second transaction to award a second product-specific reduction in a specified monetary amount on the price per unit of the consumable good to the customer in exchange for a purchase by

the customer of a second predetermined product being marketed and then adds the second product-specific reduction to another reduction amount."

10. means for adding a first discount from a first merchant to a second discount from a second merchant

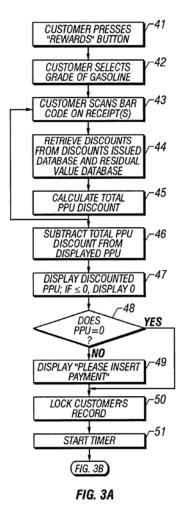
The disputed claim language appears in dependent claim 21 of the '128 patent. Claim 21 depends from independent claim 20. As discussed in Sections VI.1 and VI.3 above, the term "discount," as used in the patent, is a reduction in a specified monetary amount, not just a representation of an unspecified reduction. As discussed in Section VI.4 above, a "second merchant" is a merchant that is distinct and independent from the first merchant. The only means described in the '128 patent for adding two different discounts from two different merchants is a database controller that first retrieves the discounts from storage in a database.

The '128 patent states that a customer may scan multiple receipts from "multiple independent HVR merchants," to receive a cumulative discount at the pump. ['128 Patent, Doc# 45-4, col 4, ln 33-37]. Fig. 1 shows that a customer may scan multiple receipts at a dispenser from steps (24) through (28). As each receipt identifying an issued discount is scanned, a database controller (13) retrieves the stored discount from a discounts issued database (14) and adds it to previous discounts to determine a total PPU discount. [*Id.* at col 6, ln 15-36 ("At 26, the controller retrieves information regarding the issued discount from the HVR discounts issued database 14")]. Fig. 3A of the '128 patent, which is reproduced below, is described in the following way:

[T]he process may be started automatically when the customer selects a grade of gasoline and then at 43, scans the bar code on the receipt that was printed at the HVR POS terminal. At 44, the gas station then sends the information scanned from the bar code, which includes the discount reference number, a customer identification, and a transaction identification to the controller 13 which retrieves information relating to the issued discount from the discounts issued database 14.... If the customer scans additional receipts, the process repeats steps 42-45

and calculates a total PPU discount that combines the discounts for all scanned receipts.

[*Id.* at col 7, ln 5-20].



The disclosed structure for performing the stated function is the database controller (13) in conjunction with the discounts issued database (14) in Fig. 1. Based on the foregoing, Kroger contends that the disputed claim language means "a database processor that executes an algorithm that retrieves from computer memory and then adds together a first reduction in specified monetary mount from a first merchant and a second reduction in a specified monetary amount from another merchant that is distinct and independent from the first merchant."

11. transmission means for transmitting the unique customer identification and discount identification from the POS terminal to the discounts issued database

This disputed claim language appears in dependent claim 23 of the '128 patent and is drafted in means-plus-function format. The "unique customer identification and discount identification" were previously construed in Section VI.5 above. The only means described in the '128 patent specification for performing the stated function is a discount identification record that is sent from an in-store point of sale terminal to a discounts issued database, and therefore this disputed claim language must be construed in a manner that is consistent with that described means.

The transmission of the record is generally shown in Fig. 1 at reference number (22) and the structure of the record that enables the stated function is provided in the exemplary record that is shown in Fig. 2, which is reproduced below.

FIELD #	FIELD	DESCRIPTION TYPE		MIN	MAX	EXAMPLE		
1	DISCOUNTREFNO	MATCHES CUSTOMER'S RECEIPT WITH THIS RECORD	NUMERIC	20	20	1234561234 5600000001		
1a	DISCOUNTCHAIN	CHAIN IDENTIFIER	NUMERIC	6	6	123456		
1b	DISCOUNTSTORE	STORE IDENTIFIER NUMERIC 6		6	123456			
1C	DISCOUNTID	SITE-UNQUE DISCOUNT IDENTIFIER	NUMERIC	8	8	00000001		
2	SALEDATE	LOCAL DATE OF POS SALE	DATE	8	8	19990125		
3	SALETIME	LOCAL TIME OF POS SALE	TIME	8	8	090000		
4	SALEPOSID	SITE-RELATIVE IDENTIFIER OF POS THAT ISSUED DISCOUNT	ALPA- NUMERIC	0	6	L45		
5	UNITDISCOUNT	DISCOUNT IN CENTS PER FUEL UNIT VOLUME	NUMERIC (FLOAT)	4	5	0.15		
6	DISCOUNTMAXUNTIS	MAXIMUM FUEL UNITS AUTHORIZED FOR SALE AT DISCOUNT PRICE	NUMERIC	1	4	12		
7	TOTALDISCOUNT	DISCOUNT EXPRESSED AS AMOUNT TO BE DEDUCTED FROM TOTAL SALE	NUMERIC (FLOAT)	3	5	2.75		
8	DISCOUNTMINUNITS	MINIMUM FUEL UNITS THAT MUST BE PURCHASED TO QUALIFY FOR DISCOUNT	NUMERIC	1	3	5		
9	DISCOUNTEXPIRES	LOCAL DATE OF LAST DAY THAT DISCOUNT IS VALID	DATE	8	8	19990210		
10	COUPONIDS	LIST OF COUPON IDS THAT MADE UP THIS DISCOUNT	NUMERIC (WITH SUB- FIELDS)	0 EACH 0 TOTAL	5 EACH 179 TOTAL	23-171-999- 19713-2123		
11	COUPONCOUNT	WO. OF COUPONS THAT MADE UP THIS DISCOUNT	NUMERIC	1	2	5		
12	LOYALTYCARDID	LOYALTY CARD IDENTIFIER	NUMERIC	1	16	3456		

FIG. 2

The written description states: "Transaction data including an identification of the customer and the total discount issued is sent to the HVR discounts issued database 14 in a Discounts Issued message 22." [*Id.* at col 5, ln 26-29]. The specification further states: "Referring briefly to FIG. 2, an exemplary record format is shown for the Discounts Issued message 22 which carries customer, transaction, and store identifications to the HVR discounts issued database 14." [*Id.* at col 5, ln 37-40].

Based on this disclosure and the construction provided in Section VI.5. above, Kroger contends that the disputed claim language means "a discount identification record sent from the in-store point of sale terminal to the discounts issued database, the record including both the unique number that identifies the particular customer and the unique number that identifies the specific discount awarded to the particular customer."

VII. OVERVIEW OF THE '204 PATENT

The written description and figures of the '204 patent are very similar to the previously described '984 patent, which is related to the '204 patent through a long chain of continuation, continuation-in-part, and divisional applications. The claims of the '204 patent, however, are directed to a very specific embodiment, namely a system and process that provides a customer with a free fuel reward when a customer purchases a threshold quantity of products in a single store visit. For example, if the customer buys five (5) watermelons, the customer may receive a coupon worth \$2.00 of free gas. If the customer also earns a second free fuel reward during a second store visit, then the system adds the first and second free fuel rewards together and provides the customer with the total free fuel reward.

The written description of the '204 patent purports to provide several examples of how the disclosed fuel dispenser system can be used. Example B, which is reproduced below, is the example that is relevant to the claims of the '204 patent. The specification states:

- 1. A customer enters a store and purchases several items.
- 2. The store, which has a reward program that gives free gasoline, gives the customer a receipt ... having bar coded data ... indicating a free \$1 worth of gasoline.
- 3. The customer collects four more receipts over several visits to the store, each indicating a free \$1 worth of gasoline.
- 4. The customer sequentially places the five receipts in front of the scanning bar code reader [], and then operates the fuel dispenser [] to dispense \$5 worth of gas.
- 5. The customer also inserts a magnetic strip credit card into the magnetic strip reader device [] to allow an additional amount of gasoline to be dispensed. A charge for the additional amount is reported to a credit agency identified by the magnetic strip credit card.

['204 Patent, Doc# 45-9, col 6, ln 51 – col 7, ln 2].

VIII. DISPUTED CLAIM LANGUAGE OF THE '204 PATENT

Although each disputed phrase is addressed separately below, the parties have two fundamental disputes with respect to the asserted claim language. First, the parties disagree as to the meaning of "free fuel." Kroger contends common sense dictates that free fuel must be provided at no charge, not merely at a reduced unit price. Second, the parties dispute whether the free fuel reward is provided merely for the purchase of non-fuel products or services or, as Kroger contends, is provided in exchange for purchasing a specific quantity (i.e., number) of non-fuel products or services.

1. detecting that the customer purchased a number of non-fuel products or services in a first visit to the store

The disputed claim language appears in claim 1 of the '204 patent. The language does not recite only "detecting that the customer purchased non-fuel products or services"; the language requires "detecting that the customer purchased **a number of** non-fuel products or services." All of the words of the claim are presumed to have meaning. *Foremost in Packaging Sys. v. Cold Chain Tech.*, 485 F.3d 1153 (Fed. Cir. 2007). Therefore, the Court should not adopt a construction that renders the language "a number of" meaningless. *Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007).

Fig. 9 of the '204 patent, which is reproduced below, confirms the relevance of the highlighted language. The specification gives the following explanation of Fig. 9: "Retailers may often designate various items to trigger discounts related to competing or related items. *The quantity of these designated, or trigger items, that were purchased on each date (if any) are provided in field 306*." [*Id.* at col 9, ln 21-24 (emphasis added)]. Similarly, "[f]ield 308 is the total quantity of items purchased by a certain customer on a specific date." [*Id.* at col 9, ln 30-31].

				Fig.	9				
300 -	- SMITH, A ID NO. 1234ABC								
	DATE	PURCHASES	QUANTITY OF DESIGNATED ITEMS (PROMO)	TOTAL QUANTITY (LOYALTY)	DISCOUNT	DISCOUNT USED	DISCOUNT AMOUNT		
	302	304	<u>306</u>	308	<u>310</u>	<u>312</u>	<u>314</u>		
	1/5/99	20\$	3	5	N				
	1/17/99	15\$	5	10	Y (≧5 PROMO)	1/20/99	10¢/GAL		
	1/28/99	45\$	2	4	N				
	2/4/99	25\$	1	3	Y (>20 LOY) Y (>100\$)		10¢/GAL 25¢/GAL		
208~									
	TOTAL	\$105	11	22					
		316	318	320					

The '204 patent also refers to Fig. 9 to describe an example of a discount determination stating:

As an example, when A. Smith purchases \$20 of merchandise on Jan. 5, 1999, record 208 is created by server 204 and stored in database 206. At that time three (3) designated items were purchased out of a total quantity of five (5) items. These purchases did not meet the established criteria that would cause a discount on fuel to be made available.

Then, on Jan. 17, 1999, A. Smith purchased five designated items, 10 total items for \$15.00. This purchase will cause the total designated item purchase by this customer to exceed five and cause a fuel discount to be offered.

[*Id.* at col 9, ln 40-49 (emphasis added)].

The specification also describes Fig. 10 in a manner consistent with Kroger's construction:

At step 404 a determination is made as to whether the current purchases will cause a fuel discount to be offered. As noted above this step may include determining if the customer has purchased certain designated items that will trigger a discount, whether a total dollar value spent exceeds a predefined threshold and/or if a total quantity of items exceeds a threshold.

[*Id.* at col 10, ln 41-47 (emphasis added)].

The '204 patent thus plainly describes embodiments in which the customer is provided a fuel reward in response to the customer's purchase of a predefined threshold quantity of products. Purchasing a number of items below the predefined threshold quantity does not produce a fuel reward. The disputed claim language is consistent with these embodiments. Based on the ordinary meaning of the words of the claims and the embodiments described in the specification, Kroger contends that the disputed claim language means "determining by a comparison operation that the customer purchased a predefined threshold quantity of non-fuel products or services in a first visit to the store."

2. providing the customer with a first reward entitling the customer to a first amount of free fuel in exchange for purchasing the non-fuel products or services in the first visit

The disputed claim language appears in claim 1 of the '204 patent and refers back to the immediately preceding claim limitation for antecedent basis. As discussed above, the '204 patent clearly describes embodiments in which the customer is provided with a fuel reward in response to the customer's purchase of a predefined threshold quantity of products. With respect to the present limitation, the parties dispute the meaning of "free fuel."

The specification of the '204 patent does not explicitly define free fuel. The written description does, however, provide examples that distinguish between free fuel and fuel sold at a reduced price per unit. In Example B, the '204 patent describes "a reward program that gives free gasoline" by means of bar coded receipts indicating "a free \$1 worth of gasoline." [*Id.* at col 6, ln 51-64]. If the customer wants to dispense additional gasoline beyond the amount of free fuel awarded, the customer must also insert a credit card for payment. [*Id.* at col 6, ln 65-67].

By contrast, in Example C, the '204 patent describes providing a customer with a ten cent per gallon discount for use of a membership card. [*Id.* at col 7, ln 3-12]. When the customer dispenses fuel, the customer's account is credited for the purchase adjusted by the ten cent per gallon discount. [*Id.* at col 7, ln 15-17].

The difference between free fuel and fuel at a reduced price per unit is that the customer can receive free fuel without incurring any charge at all. A free fuel reward enables the customer to dispense an amount of fuel at no cost and with no further obligation to the fuel merchant. Fuel sold at a reduced price per unit, however, always has some cost associated with it, no matter how small the volume of fuel dispensed. In other words, a total price per unit discount less than the

posted price per unit of fuel does not result in free fuel; the customer must still pay some amount of money for any fuel that is dispensed.

Consider, for example, the remarks of the applicant during prosecution of Excentus's '128 patent, which is discussed above. The '128 patent predates the '204 patent and shares a common inventor with the '204 patent, Randy Nicholson. Recall that the '128 patent awards a first discount on the PPU in response to a purchase of a first cross-marketed product, awards a second discount on the PPU in response to a purchase of a second cross-marketed product, and adds the first discount to the second discount to determine a total discount on the PPU. In response to a prior art rejection, the applicant argued:

[T]he claimed invention adds together multiple discounts on the price-per-unit of a single product. Thus, if enough cross-marketed products are purchased, the PPU discount could be equal to or greater than the posted PPU on the dispenser. A customer, therefore, could accumulate PPU discounts and then fill up her vehicle with gasoline for free.

['128 Prosecution History, Doc# 45-7, PageID# 1661]. In other words, only an accumulated PPU discount greater than the original price results in free fuel. The award of a price per unit reduction less than the original posted price is not a free fuel reward; the customer is still charged for any amount of fuel dispensed, only at a reduced price.

Kroger contends that the disputed claim language means "providing to the customer, upon detection that the customer purchased the predefined threshold quantity of non-fuel products or services during the first store visit, a first reward entitling the customer to receive a first defined amount of fuel at no charge to the customer, rather than at a reduced unit price."

3. detecting that the customer purchased a number of non-fuel products or services in a second visit to the store

This disputed claim language appears in claim 1 of the '204 patent and is identical to the language addressed in section VIII.1 above except for the substitution of the word "second" for the word "first." For all of the reasons previously stated in section VIII.1, Kroger contends that the disputed claim language means "determining by a comparison operation that the customer purchased a predefined threshold quantity of non-fuel products or services in a second visit to the store."

4. providing the customer with a second reward entitling the customer to a second amount of free fuel in exchange for purchasing the non-fuel products or services in the second visit

This disputed claim language appears in claim 1 of the '204 patent and is identical to the language addressed in section VIII.2 above except for the substitution of the word "second" for the word "first." For all of the reasons previously stated in section VIII.2, Kroger contends that the disputed claim language means "providing to the customer, upon detection that the customer purchased the predefined threshold quantity of non-fuel products or services during the second store visit, a second reward entitling the customer to receive a second defined amount of fuel at no charge to the customer, rather than at a reduced unit price."

5. dispensing an amount of free fuel to the customer equal to the total of the first and second amounts of free fuel

The disputed claim language is recited in claim 1 of the '204 patent and refers back to the claim limitations discussed above for antecedent basis.

Example B is the only embodiment described in the specification of the '204 patent in which free fuel rewards are added together. It is, therefore, the best indicator of the meaning of the disputed claim language. With respect to Example B the specification states:

2. The store, which has a reward program that gives free gasoline, gives the customer a receipt ... having bar coded data ... indicating a free \$1 worth of gasoline.

- 3. The customer collects four more receipts over several visits to the store, each indicating a free \$1 worth of gasoline.
- 4. The customer sequentially places the five receipts in front of the scanning bar code reader [], and then operates the fuel dispenser [] to dispense \$5 worth of gas.

['204 Patent, Doc# 45-9, col 6, ln 55-64]. Thus, the customer dispenses, at no charge, an amount of fuel equal to the sum of the previously awarded free fuel amounts.

For all of the foregoing reasons, Kroger contends that the disputed claim language means "dispensing at no charge to the customer, rather than at a reduced unit price, a total amount of fuel equal to the sum of the first and second amounts previously awarded to the customer."

6. dispensing an amount of free fuel

The disputed claim language appears in claim 1 of the '204 patent. Excentus believes that the language should be construed separately. Kroger believes that it should be construed within the context of the surrounding claim language as Kroger has done in the immediately preceding limitation. For the reasons previously stated above, Kroger believes that the disputed claim language means, "dispensing at no charge to the customer, rather than at a reduced unit price, an amount of fuel."

7. storing the first and second rewards in a rewards database

The disputed claim language appears in dependent claim 5, which depends from claim 1. The language refers back to claim 1 for antecedent basis with respect to the meaning of "the first and second rewards." As previously determined in Section VIII.2 above, the first reward is a first defined amount of fuel provided at no charge to the customer, rather than at a reduced unit price. Similarly, the second reward is a second defined amount of fuel provided at no charge to the customer, rather than at a reduced unit price. The disputed limitation does not recite storing

"the total of the first and second amounts of free fuel," which is also referred to in claim 1.

Instead, the claim language requires storing the first "and" second rewards in a database.

In the written description, the '204 patent briefly describes the claimed invention by stating:

The method also includes *storing the first and second rewards in a rewards database*; identifying the customer during a subsequent fueling transaction ...; *retrieving the first and second rewards from the rewards database*; and dispensing by the fueling station, an amount of free fuel to the customer equal to the total of the first and second amounts of free fuel.

['204 Patent, Doc# 45-9, col 2, ln 41-49 (emphasis added)].

Based on the ordinary meaning of the claim language and the description in the '204 patent in which *both* discounts are retrieved from the database, Kroger contends that the disputed claim language means "storing in a rewards database, for later redemption and as separately identifiable values, both the first defined amount of free fuel awarded to the customer and the second defined amount of free fuel awarded to the customer."

8. dispensing additional fuel to the customer

The disputed claim language appears in dependent claim 6, which depends from claim 1. Claim 1 recites the step of "dispensing an amount of free fuel to the customer equal to the total of the first and second amounts of free fuel." [*Id.* at col. 13, ln 56-57]. Claim 6 then recites "dispensing additional fuel to the customer; and charging ... only for the additional fuel dispensed." [*Id.* at col 14, ln 21-23].

When claims 1 and 6 are considered together, in context, any fuel dispensed to the customer up to the total of the first and second amounts of free fuel is free (i.e., at no charge to the customer). "Additional fuel," which is dispensed at a cost to the customer, is not dispensed before the free fuel; additional fuel is only dispensed after the free fuel.

As suggested by Example B in the '204 patent, if the customer does not provide a credit card or method of payment at the pump, the customer will not be allowed to dispense an additional amount of fuel beyond the free amount. [*Id.* at col 6, ln 62 – col 7, ln 2 ("The customer also inserts a ... credit card ... to allow an additional amount of gasoline to be dispensed.")]. Accordingly, it should be understood from the written description that the initial amount of fuel dispensed is the free amount and the "additional fuel" is dispensed only after the free fuel is dispensed. Kroger contends, therefore, that the disputed claim language means "after dispensing the amount of fuel at no charge, dispensing more fuel to the customer."

9. means for detecting that the customer purchased a number of non-fuel products or services in a first visit to the store, and that the customer purchased a number of non-fuel products or services in a second visit to the store

The disputed claim language appears in independent claim 7, which is a system claim that corresponds to the method claimed in independent claim 1. The claim limitation is drafted in means plus function format and is thus governed by 35 U.S.C. §112, ¶6. The recited function in the disputed language is nearly identical to the method steps of claim 1 previously addressed in Sections VIII.1 and VIII.3 above. Kroger contends that the stated function should be construed in a manner consistent with the method steps of claim 1. Accordingly, Kroger contends that the disputed claim language requires a *means for* "determining by a comparison operation that the customer purchased a predefined threshold quantity of non-fuel products or services in a first visit to the store and determining by a comparison operation that the customer purchased a predefined threshold quantity of non-fuel products or services in a second visit to the store."

The specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its

proposed claim construction. Excentus contends that the corresponding structure is merely a POS controller. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 15]. A general purpose POS controller, however, does not perform the recited function. Moreover, it is unclear from the specification what other structure is required for "detecting" that "the customer" made the required purchases in first "and" second store visits. Is a scanner required? A customer identification card? A database for tracking the purchases over time?

Regardless of whether the specification contains any structure that could possibly perform the stated function, "the specification is not clear as to the structure that the patentee intends to correspond to the claimed function," which is impermissible. *Medical Instrumentation and Diagnostics Corp.*, 344 F.3d at 1211. The claim, therefore, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

10. means for providing the customer with a first reward entitling the customer to a first amount of free fuel in exchange for purchasing the non-fuel products or services in the first visit, and for providing the customer with a second reward entitling the customer to a second amount of free fuel in exchange for purchasing the non-fuel products or services in the second visit

The disputed claim language appears in claim 7 and is also drafted in means-plusfunction format. The recited function is nearly identical to the method steps of claim 1
previously addressed in Sections VIII.2 and VIII.4 above. Kroger contends that the stated
function should be construed in a manner consistent with the method steps of claim 1.

Accordingly, Kroger contends that the disputed claim language requires a *means for* "providing
to the customer, upon detection that the customer purchased the predefined threshold
quantity of non-fuel products or services during the first store visit, a first reward entitling
the customer to receive a first defined amount of fuel at no charge to the customer, rather
than at a reduced unit price, and for providing to the customer, upon detection that the

customer purchased the predefined threshold quantity of non-fuel product or services during the second store visit, a second reward entitling the customer to receive a second defined amount of fuel at no charge to the customer, rather than at a reduced unit price."

The specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. Excentus contends that the corresponding structure is a computing center, computer, or server. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 16]. A general purpose computer or server, however, does not perform the recited function unless specially programmed. The specification fails to describe or show a particular algorithm that could be performed by a general computer to carry out the function. Moreover, it is unclear from the specification what other structure is required to perform the stated function of "providing" the customer with a "first reward" and a "second reward." Is a bar coded receipt printer required? A magnetic encoder? A database?

The specification is not clear as to the structure that the patentee intends to correspond to the claimed function. The claim, therefore, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

11. means for dispensing an amount of free fuel to the customer equal to the total of the first and second amounts of free fuel

The disputed claim language, which is written in means-plus-function format, appears in claim 7. The recited function is identical to the method step of claim 1 previously construed in Section VIII.5 above. Kroger contends that the stated function should be construed in the same way as the identical method step of claim 1. Accordingly Kroger contends that the disputed claim language requires a *means for* "dispensing at no charge to the customer, rather than at

a reduced unit price, a total amount of fuel equal to the sum of the first and second amounts previously awarded to the customer."

The specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. Excentus contends that the corresponding structure is a fuel dispenser. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 17]. It is unclear from the specification, however, what algorithm is to be performed by a general purpose fuel dispenser that would enable it to dispense an amount of fuel equal to only the total of the first and second awarded amounts of free fuel. Kroger contend, therefore, that the claim, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

12. a rewards database for storing the first and second rewards

The disputed claim language appears in dependent claim 12, which depends from claim 7. The language corresponds to the method step of claim 1 previously addressed in Section VIII.7 above. Because the language is nearly identical, Kroger contends that the disputed claim language should be construed in manner consistent with claim 1 to mean "a rewards database that stores, for later redemption and as separately identifiable values, both the first defined amount of free fuel awarded to the customer and the second defined amount of free fuel awarded to the customer."

13. identifying means

Claim 12 recites in pertinent part: "wherein the means for identifying the customer during a subsequent fueling transaction includes identifying means." ['204 Patent, Doc# 45-9, col 15, ln 1-3]. The disputed claim language is written in means-plus-function format. The function, as

evident from the surrounding claim language, means identifying the customer during a subsequent fueling transaction.

The specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 17]. Regardless of whether the specification contains any structure that could possibly perform the stated function, "the specification is not clear as to the structure that the patentee intends to correspond to the claimed function" which is impermissible. *Medical Instrumentation and Diagnostics Corp.*, 344 F.3d at 1211. The claim, therefore, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

14. means responsive to reading the credit card for dispensing additional fuel to the customer

The disputed claim language appears in claim 13, which depends from claim 7. The language is written in means-plus-function format and corresponds to the method step of claim 6, which was previously construed in Section VIII.8 above. Kroger contends that the stated function should be construed in the same way as the identical method step of claim 1. Accordingly, Kroger contends that the disputed claim language requires a *means for* "dispensing, in response to reading the customer's credit card, more fuel to the customer after dispensing the amount of fuel at no charge."

The specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. Excentus contends that the corresponding structure is a fuel dispenser. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 17]. It is unclear from the

specification, however, what algorithm would enable a general purpose fuel dispenser to perform the stated function.

The only relevant description in the specification of the '204 patent is the description of Example B. Even that description, however, does not provide any detail as to how the fuel pump should be programmed to operate. Must the customer's credit card be swiped before any fuel, including free fuel, is dispensed in case the customer pumps more than the free fuel award? Is the pump designed to stop after the total free fuel reward has been received, at which time the customer can insert a credit card and pump additional fuel? The means including the algorithm or process performed by the fuel dispenser is not specified. The claim, therefore, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

15. means for charging the credit card only for the additional fuel dispensed

Kroger contends that the disputed claim language, which appears in claim 13, is indefinite, and therefore invalid. As with the preceding means-plus-function limitations, the specification of the '204 patent fails to clearly link corresponding structure for performing the stated function. Excentus contends that the corresponding structure is a POS controller. [Substitute Joint Claim Construction Chart, Doc# 48-1, pg 18]. Excentus fails to cite, however, any link in the specification between the alleged structure and the stated function. Nor does Excentus cite to any algorithm in the specification that is carried out by a POS controller to perform the stated function. The patentee, therefore, has impermissibly attempted to claim in functional terms unbounded by any reference to structure in the specification. *Medical Instrumentation and Diagnostics Corp.*, 344 F.3d at 1211.

IX. OVERVIEW OF THE '942 PATENT

The '942 patent describes two distinct inventions. The first is depicted in Figs. 1 and 2 as described in columns 3 and 4 of the '942 patent. ['942 Patent, Doc# 45-11, PageID # 1988, 1989, 1993]. The second is depicted in Figs. 3 and 4 as described in columns 5 and 6 of the patent. ['942 Patent, Doc# 45-11, PageID # 1990, 1991, 1994].

As succinctly summarized by the Patent Examiner during prosecution of the '942 patent, the first distinct invention described in the '942 patent is directed to a "process for identifying a card issuer and associating the card issuer with a PPU discount for fuel given to a card bearer/user;" the second invention is a "process for providing PPU discounts for fuel in exchange for redeemed reward points from a reward program and for exchanging at least a portion of the reward points for a predefined PPU discount for fuel." ['942 Prosection History, Doc# 45-15, PageID # 2434]. The Patent Examiner required the applicant to elect only one of the inventions to pursue for the purpose of substantive examination. [*Id.*]. The applicant elected the first invention and cancelled all claims directed to the second invention, i.e., the embodiment in which the customer exchanges accumulated reward points for a price-per-unit discount on fuel. [*Id.*]. Only the first described invention, which is discussed in more detail below, is claimed in the issued claims of the '942 patent. [*Id.*].

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⁶ Fig. 1 of the '942 patent illustrates a process in which "a card issuer and a retail fuel merchant enter into an affinity-type relationship, which offers an immediate discount on the [price-per-unit] of fuel at the merchant's fueling stations if the customer uses the card issuer's relationship card." ['942 Patent, Doc# 45-11, col 4, ln 26-31].

⁷ Fig. 3 of the '942 patent illustrates an embodiment in which an agreement between a retail fuel merchant and a third party vendor enables a customer to exchange their accumulated reward points for a price-per-unit discount on fuel. ['942 Patent, Doc# 45-11, col. 3, ln 28-55]. Fig. 4 of the '942 patent illustrates an embodiment in which "reward points are again exchanged for a PPU discount on fuel, but the customer is given real-time access to his reward point totals." [Id. at col 6, ln 1-5]. Thus, "[i]f the customer has a large number of points in his account, several levels of redemption/PPU discounts may be presented, and the customer my select which level he desires to apply to this fueling transaction." [Id. at col. 6, ln 19-24].

⁸ As originally filed, the '042 patent application contained 4 independent along.

⁸ As originally filed, the '942 patent application contained 4 independent claims – 1, 11, 18, and 21. ['942 Prosecution History, Doc# 45-15, PageID# 2463-2469]. Application claims 1 and 11 were both directed to the first disclosed invention (Figs. 1 and 2) and ultimately issued as claims 1 and 9, respectively. Application claims 18 and 21 (and all claims depending therefrom) were directed to the second invention and were cancelled. [Doc# 45-15, PageID# 2434]. Application claim 18, for example, recited the step of "exchanging at least a portion of the customer's reward points for a predefined PPU discount for fuel." [Doc# 45-15, PageID# 2467]. Application claim

The invention ultimately claimed in the '942 patent relates to a system and method of discounting the price-per-unit of fuel during a fuel transaction by an amount that depends on the identity of the bank that issued the customer's payment card. ['942 Patent, Doc# 45-11, col 4, ln 26-31]. Importantly, the applicant made very clear during prosecution that the claimed invention involves multiple card issuers and that the different card issuers are associated with different price-per-unit discounts negotiated between each issuer and the fuel merchant. ['942 Prosecution History, Doc# 45-14, PageID# 2350; Doc# 45-12, PageID# 2112-13, 2067, 2050]. Customers, therefore, receive different price-per-unit discounts based upon which issuer's card they choose to use for payment. [Id.].

In addition, the invention claimed in the '942 patent provides an "immediate" discount to the customer *based only* on the customer's use of a particular issuer's card. ['942 Patent, Doc# 45-11, col 1, ln 41-49, col 3, ln 60 – col 4, ln 4, col 4, ln 26-31]. This feature distinguishes the claimed invention from the disclosed but unclaimed second invention in the '942 patent, which required a customer to first redeem reward points to receive a price-per-unit discount on fuel. [*Id.* at col 6, ln 1-27]. Again, the applicant made very clear during prosecution that the discount awarded to the customer is *immediate and based only upon the selection of which financial card the customer uses for the fuel purchase*; the discount is not based on the customer's redemption of reward points or a customer's prior purchases. ['942 Prosecution History, Doc# 45-15, PageID# 2391; Doc# 45-12, PageID# 2051]. This feature is apparent in each issued claim of the '942 patent, all of which require discounting the price-per-unit of fuel by an amount "equal to" a price-per-unit discount associated with the particular issuer – no more, no less.

²¹ similarly recited the step of "converting the customer's available reward points to a PPU discount for fuel." [Doc# 45-15, PageID# 2468].

When considered in the context of the prosecution history, the issued claims of the '942 patent do not cover (i) a system or process in which reward points must first be redeemed in order to receive a discount on fuel or (ii) a system or process in which the customer cannot receive different discount amounts based on the use of different payment cards issued by different issuers.

X. DISPUTED CLAIM LANGUAGE OF THE '942 PATENT

The parties dispute the scope of the asserted claims of the '942 patent in many different respects. Each disputed term or phrase within the asserted claims is addressed separately below.

One fundamental dispute between the parties relates to the number of card issuers required by the claims. Kroger contends that the claims require individualized PPU discounts to be awarded for cards issued by multiple card issuers. Kroger further contends that the claims do not cover a system in which only payment cards from a single issuer are eligible for a price-per-unit discount at any given time.

The preambles of claims 1 and 9 contain the claim language most relevant to this issue as highlighted below.

Claim 1. A computer-implemented method of discounting a price-per-unit (PPU) of fuel at a fuel merchant and <u>increasing customer use of third-party financial</u> <u>cards issued by a plurality of third-party issuers</u> ...

Claim 9. A system for discounting a price-per-unit (PPU) of fuel at a fuel merchant and <u>increasing customer use of a third-party financial card issued</u> by a third-party issuer, wherein the third-party financial card is selected <u>from a group consisting of different issuers of credit cards</u> ...

['942 Patent, Doc# 45-11, claim1 and claim 9]. Although the language in each preamble is different, the prosecution history of the '942 patent makes clear that both should be construed in the same way.

Whether a preamble of a claim is a limitation on the scope of the claim must be determined based on a review of the entire patent and its prosecution history to understand what the inventors actually invented and intended to encompass by the claim. *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). A preamble limits the invention if it is necessary to give life, meaning, and vitality to the claim. *Catalina Mktg. Int'l, Inc., v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002). "Moreover, clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention." *Id.* (citing *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1375 (Fed. Cir. 2001)); *see also Storage Tech. Corp. v. Cisco Sys. Inc.*, 329 F.3d 823, 835 (Fed. Cir. 2003).

As shown below, during prosecution of the '942 patent, the applicant amended the preambles of both independent claims 1 and 9, and argued for patentability over the cited prior art based on those preamble amendments. Under such circumstances, the preambles, and the applicant's arguments relating thereto, become limitations on the scope of the claims upon which the public, including Kroger, is entitled to rely.

1. increasing customer use of third-party financial cards issued by a plurality of third-party issuers

The written description of the '942 patent unambiguously states, "The present invention is a promotional program for credit, debit, and loyalty cards." ['942 Patent, Doc# 45-11, col 3, ln 21-24]. The basic concept of the patent is that a card issuer may enter into an affinity-type agreement with a fuel merchant to increase customer use of the issuer's financial card by awarding price-per-unit discounts on fuel purchased with the card. [*Id.* at col 3, ln 52-60 ("In the preferred embodiment of the present invention, the card issuer enters an agreement with the retail

fuel merchant to provide an incentive for customers to use the issuer's card.")]. The issuer of a financial card, which may be a bank, is a "third-party issuer" if it is unrelated to the fuel merchant that accepts the financial card as payment for a fuel purchase. ['942 Patent, Doc# 45-11, col 3, ln 24-37, 52-60 ("When the card is read ... at a retail fuel merchant, the Bank Identification Number (BIN) range of the card number may be utilized to identify a specific card issuer such as CitiBank, Wells Fargo, Bank of America, and the like.")].

The specification of the '942 patent suggests that "[t]he retail fuel merchant *may* have affinity-type relationships with multiple card issuers, and each relationship *may* specify a different PPU discount level." [Id. at col 4, ln 44-46 (emphasis added)]. During prosecution of the '942 patent, however, the claims defining the protected invention were amended to *require* the fuel merchant to have multiple relationships with multiple card issuers. Kroger, therefore, contends that the disputed claim language means "increasing use of multiple, different payment cards issued to customers by multiple, different issuers that are unrelated to the fuel merchant."

The claim language at issue appears in the preamble of claim 1 of the '942 patent. As originally filed, the preamble of independent claim 1 simply recited: "A computer-implemented method of discounting a price-per-unit (PPU) of fuel at a fuel merchant, said method comprising:" ['942 Prosecution History, Doc# 45-15, PageID# 2463]. The original claim lacked any recitation of multiple card issuers.

In a first Office action, the Patent Examiner rejected original claim 1 based on a 1997 prior art article to Hisey that described awarding an automatic price-per-unit discount on fuel in response to the use of a single private label credit card. ['942 Prosecution History, Doc# 45-15, PageID# 2434-2435]. To overcome the Examiner's rejection, the applicant amended claim 1 to

require that the claimed card entitling the customer to a discount must be issued by a "third-party issuer." ['942 Prosecution History, Doc#45-15, PageID# 2424, 2428]. Thus, the preamble of claim 1, as amended, recited:

A computer-implemented method of discounting a price-per-unit (PPU) of fuel at a fuel merchant and increasing customer use of a third-party financial card issued by a third-party issuer, wherein the third-party financial card is selected from a group consisting of credit cards and debit cards, said method comprising:

['942 Prosecution History, Doc# 45-15, PageID# 2424]. This amendment still did not refer to multiple card issuers.

Despite the applicant's claim amendment, the Examiner persisted with the rejection of claim 1 in view of the prior art. The applicant responded with the following argument for patentability:

The Examiner does cite the Hisey article in which a gas merchant, in cooperation with a private credit card, instantly rolls back the price per gallon when the consumer uses the private card at the pump. However, the fact that the price of a gallon (liter in the reference) rolls back when a particular card is used does not support the claim limitation that the discount **magnitude** is dependent upon the identity of the card issuer. Nothing in the cited prior art even hints that the magnitude of the discount (roll-back) is dependent upon which card is used. The fact that the magnitude is dependent on the card issuer means that different cards yield different magnitudes of gas discounts. The prior art simply does not address this limitation. Accordingly, independent claims 1 and 11 should be held allowable.

['942 Prosecution History, Doc# 45-14, PageID# 2350].

In a subsequent Office action, the Examiner acknowledged the applicant's arguments by stating that "the Applicant argues that independent claims 1 and 11 recite that 'the discount **magnitude** is dependent upon the identity of the card issuer'." ['942 Prosecution History, Doc# 45-13, PageID# 2122]. The Examiner rejected the arguments, however, because "it should be noted that the claims do not contain such explicit language." [*Id.*].

The applicant responded by further amending the preamble of claim 1 as follows:

A computer-implemented method of discounting a price-per-unit (PPU) of fuel at a fuel merchant and increasing customer use of [[a]] third-party financial eard cards issued by a plurality of third-party issuer issuers, wherein the third-party financial eard is cards are selected from a group consisting of credit cards and debit cards, said method comprising:

['942 Prosecution History, Doc# 45-12, PageID# 2108]. In addition, the applicant contemporaneously argued:

Claims 1 and 11 have been amended to make it perfectly clear that there can be multiple credit card issuers and each issuer can have an independent PPU discount.... Thus, as amended, all of the claims now recite more clearly that the amount of a discount that a customer receives for fuel is dependent upon the issuer of a credit facility. Accordingly, all customers of the merchant are not treated equally with respect to the amount of discount a customer will receive for fuel purchases. The actual value of the PPU discount depends upon the actual issuer of the credit card.

The prior art cited does not perform such a function and there is no hint whatsoever in the prior art that the PPU discount is dependent upon who the issuer of the credit card is....

. . .

Hisey teaches that there can be a discount on fuel simply by using a credit card. Certainly, if there is a PPU discount than [sic] there must be an amount set for that discount. However, the claims now clearly recite that there can be multiple credit card issuers and that each issuer can have a different PPU discount if the issuer so desires.

['942 Prosecution History, Doc# 45-12, PageID# 2112-13]. Only after these amendments and arguments did the Examiner allow the claims.

Based upon this prosecution history, there can be no question that the claim language, as allowed and issued, requires the participation of multiple, different card issuers such that the amount of the discount awarded to a customer depends on which issuer's card is selected for payment. The disputed claim language does not cover a system in which payment cards from only a single issuer are eligible for a discount on fuel. Such a system was previously disclosed in the prior art Hisey article relied upon by the Examiner. The applicant specifically amended claim 1 to distinguish over Hisey and, therefore, surrendered coverage over that subject matter.

2. storing in a database, a PPU discount associated with one of third-party issuers [sic]

This disputed language from claim 1 of the '942 patent must be construed consistent with the requirement that multiple issuers are facilitated by the claimed method, as it is the claimed database that enables each issuer to have its own respective PPU discount. The '942 patent teaches a relationship database (23) for associating the identified issuer of a financial card with a price-per-unit discount for fuel. ['942 Patent, Doc# 45-11, Fig. 2, col. 2, ln 20-22, col 5, ln 4-6]. In describing the flow chart in Fig. 1, the '942 patent states, "The BIN range from the card number is utilized to identify the card issuer, and at step 14 the dispenser controller retrieves an associated PPU discount from a relationship database." [Id. at col 4, ln 41-44]. The stored PPU discount is specific to a single issuer because "[t]he retail fuel merchant may have affinity-type relationships with multiple card issuers, and each relationship may specify a different PPU discount level." [Id. at col 4, ln 44-46]. Thus, "[t]he dispenser controller uses the card issuer ID to access a relationship database 23 and retrieve an associated PPU discount." [Id. at col 5, ln 4-6].

The disputed claim language appears in independent claim 1 of the '942 patent and was added by amendment during prosecution. ['942 Prosecution History, Doc# 45-15, PageID# 2424, Doc# 45-12, PageID# 2046, 2009]. As amended by the applicant, the claim recited "storing in a database, a PPU discount associated with *a number of third-party issuers*." ['942 Prosecution History, Doc# 45-12, PageID# 2046 (emphasis added)]. The Examiner believed this language could have been misinterpreted to mean that a single price-per-unit discount applicable to multiple issuers was stored in a database. Therefore, prior to allowance, the Examiner amended the language in an attempt to clarify, in a manner consistent with the applicant's arguments, that the PPU discount referred to in the claim is uniquely associated within the

database with just one of a plurality of issuers. ['942 Prosecution History, Doc# 45-12, PageID# 2009]. Under the heading "Reason For Allowance," the Examiner stated:

The prior art taken alone or in combination does not teach the combinations of the claim limitations, as recited in independent claims 1 and 11, or more particularly a method of reading a customer's financial card during a fuel transaction, identifying a third-party issuer of the financial card and a specific PPU (price-per-unit) discount of fuel stored in a database under the financial card issuer identification and providing the specific price-per-unit (PPU) or price-per-gallon (PPG) discount on fuel to the customer as specified by the issuer during a fuel transaction at a participating fuel merchant.

[*Id.* (emphasis added)]. The Examiner's amendment, though poorly worded, is consistent with the remaining language of the claim which provides "each issuer having a PPU discount individually associated therewith." ['942 Patent, Doc# 45-11, col 6, ln 64-65].

Within the context of the rest of claim 1, the stored "PPU discount" referred to in the disputed claim language must be a specified monetary amount such as ten cents off per gallon, rather than a percentage discount or some other value. Specifically, claim 1 goes on to recite the steps of "calculating the redeemed discount by *multiplying the dispensed number of units of fuel by the PPU discount* associated with the identified third-party issuer of the financial card," and "allocating the redeemed discount between the third-party issuer of the financial card and the fuel merchant." [*Id.* at col 7, ln 6-11 (emphasis added)]. If the stored PPU discount associated with the issuer is expressed as a percentage, then the redeemed discount for allocation would be calculated as follows: (*X gallons dispensed*) * (*Y% discount*). The product would be a nonsensical, non-monetary number, which cannot be allocated. Instead, the stored PPU discount associated with the issuer must be expressed as a fixed monetary amount. For example, (*ten gallons dispensed*) * (*ten cents per gallon discount*) = (\$1.00 redeemed discount), which can be allocated between the issuer and the fuel merchant.

For the reasons stated above, Kroger contends that the disputed claim language means "storing in a database a price per unit reduction in a specified monetary amount to which a customer is entitled for using a specific issuer's payment card that is promoted, where the issuer is unrelated to the fuel merchant."

3. the PPU discount is defined in affinity-type agreements between a fuel merchant and third-party issuers

The disputed claim language, which appears in claim 1, is ambiguous. Following the Examiner's amendment to the immediately preceding limitation, which is addressed above, the present limitation now literally states that "the" PPU discount associated with "one" third-party issuer (as clarified by the Examiner) is "defined in affinity-type agreements [(plural)] between a fuel merchant and third-party issuers [(plural)]." Such an arrangement is not described in the '942 patent. Rather, the specification suggests that each issuer has a separate affinity agreement with the fuel merchant that defines a distinct PPU discount associated with the issuer. ['942 Patent, Doc# 45-11, col. 4, ln 44-46].

Based on Kroger's prior constructions, and to the extent that the disputed claim language is not found to be indefinite, Kroger contends that the language should mean "the price per unit reduction in a specified monetary amount is defined in an affinity-type agreement between a fuel merchant and an issuer that is unrelated to the fuel merchant."

4. each issuer having a PPU discount individually associated therewith

The disputed claim language is located in claim 1 of the '942 patent and was added by amendment at the same time that the applicant amended the preamble to require a plurality of third-party issuers. ['942 Prosecution History, Doc# 45-12, PageID# 2108]. In contemporaneous remarks the applicant stated, "Claims 1 and 11 have been amended to make it perfectly clear that there can be multiple card issuers and each issuer can have an independent PPU discount." [*Id*.

at PageID# 2112]. The claim limitation must therefore be construed in a manner consistent with multiple issuers, each of which has its own PPU discount that is specific to that issuer. For these reasons, and based on Kroger's preceding constructions, Kroger contends that the disputed language means "each issuer having an independent price per unit reduction in a specified monetary amount associated with the issuer."

5. associating the identified third-party issuer of the financial card with the stored PPU discount for fuel

The disputed claim language appears in both independent claims 1 and 9 of the '942 patent and must be construed in a manner consistent with the requirement that each of the multiple issuers has its own respective PPU discount that is specific to that issuer. The specification of the '942 patents states that first the BIN range on a customer's card is used to "identify the card issuer." ['942 Patent, Doc# 45-11, col 4, ln 41-42, col 4, ln 67- col 5, ln 4]. The card issuer ID is then used to access a relationship database and retrieve an associated PPU discount for the issuer. [Id. at col 5, ln 4-6]. This description is consistent with the Examiner's understanding of the claim as provided in the Examiner's reasons for allowance. The Examiner stated:

The prior art taken alone or in combination does not teach the combinations of the claim limitations, as recited in independent claims 1 and 11, or more particularly a method of reading a customer's financial card during a fuel transaction, identifying a third-party issuer of the financial card and a specific PPU (price-per-unit) discount of fuel stored in a database under the financial card issuer identification and providing the specific price-per-unit (PPU) or price-per-gallon (PPG) discount on fuel to the customer as specified by the issuer during a fuel transaction at a participating fuel merchant.

['942 Prosecution History, Doc# 45-12, PageID# 2009 (emphasis added)].

Based on this description and Kroger's preceding constructions, Kroger contends that the claim language means "associating the identity of the third-party financial card issuer with

the stored price per unit reduction in a specified monetary amount to which the customer is entitled for using the third-party issuer's financial card, where the third party issuer is unrelated to the fuel merchant."

6. discounting a PPU of the fuel posted on the fuel dispenser by an amount equal to the PPU discount associated with the identified issuer of the financial card

"Equal to" means equal to – no more, no less. If the stored PPU discount associated with an identified issuer is, for example, five cents per gallon, then the disputed claim language requires reducing the price-per-unit of fuel displayed on the fuel dispenser by five cents – no more, no less. Consistent with the arguments made during prosecution to overcome the prior art, Kroger contends that the disputed claim language means "lowering the price per unit of fuel displayed on the fuel dispenser by only the price per unit reduction in a specified monetary amount associated with the issuer of the customer's payment card."

The disputed claim language appears in claim 1. Claim 1 goes on to recite "dispensing a number of units of fuel to the customer at *the discounted PPU*." ['942 Patent, Doc# 45-11, col 7, ln 4-5 (emphasis added)]. "The discounted PPU" refers back for antecedent basis to the disputed claim language in the immediately preceding claim limitation in which the posted price-per-unit of fuel is reduced by an amount equal to the PPU discount associated with the identified issuer of the customer's financial card. The discounted price received by the customer, therefore, is based only on the PPU discount associated with the issuer of the customer's card, nothing else.

Kroger contends that claim 1 requires that the actual price reduction at the pump be "equal to" a negotiated PPU discount defined in an agreement between the issuer and the fuel merchant. As demonstrated by the prosecution history discussed below, the claim language does not accommodate additional or different discounts based on, for example, the redemption of

reward points. Kroger contends, therefore, that the disputed claim language does not cover a process of reducing the displayed price-per-unit of fuel by a variable amount that is based on both the number of points redeemed by a customer and the customer's use of a particular payment card, where use of the payment card alone, without redemption of points, does not produce any price reduction at the pump. To the contrary, under the claim the customer must receive the discount associated with the identified issuer immediately and regardless of whether the customer has redeemed any points.

The specification and prosecution history of the '942 patent confirm Kroger's interpretation of the claim language. The written description states:

With existing affinity-type relationships, the reward does not occur at the time or point of purchase. Instead, the reward is posted to the customer's credit card account and appears on the customer's monthly account statement. The reward may appear as a monetary credit, or may appear as points, which the customer can redeem when the cumulative total surpasses defined threshold levels. Thus, the reward is not immediate, and the customer must take additional steps to redeem the reward.

. . .

... A key difference between the inventive affinity-type relationship and existing affinity-type relationships is that the inventive relationship provides an immediate discount at the point of purchase, while existing relationships, as discussed above, provide credits on the customer's credit card statement at a later date, or points that the customer must redeem when an award level is reached.

When the customer uses the relationship card to purchase fuel at the participating retail fueling station, the dispenser immediately lowers the priceper-gallon displayed on the dispenser.

[*Id.* at col 1, ln 41-49, col 3, ln60 – col 4, ln 4 (emphasis added)].

Similarly, the prosecution history distinguishes the claimed invention from prior art in which the customer must first purchase other products in order to receive a fuel discount. The applicant argued:

[B]uying a product and obtaining a discount is different from using a credit card to obtain a discount on fuel. In the former, a product (other than fuel) was

purchased. In the later, only fuel was purchased and there is no other product being "bought" as taught by [the prior art]. The concept of requiring a customer to buy a product first in order to obtain fuel at a discount is a different concept from allowing a customer to buy fuel without first buying anything else with the discount based only upon the selection of which financial card the customer uses for the fuel purchase. The Examiner seems to be saying that requiring a product purchase in order to obtain a fuel discount is the same as requiring a credit card to obtain a fuel discount. This is simply not so.

['942 Prosecution History, Doc# 45-12, PageID# 2051 (emphasis added)].

Based on the foregoing, the disputed claim language requires lowering the price-per-unit of fuel immediately, without the need to redeem points or meet any other established criteria, by only the amount associated with the issuer, each time a customer presents the issuer's card for payment. Discounting the price-per-unit of fuel by an amount that is based on both the number of reward points redeemed by a customer and use of a store branded credit card is not discounting by "an amount equal to the PPU discount associated with the identified issuer."

7. allocating the redeemed discount between the third-party issuer of the financial card and the fuel merchant

The disputed claim language appears in claim 1 of the '942 patent and was added by amendment during prosecution. ['942 Prosecution History, Doc# 45-15, PageID# 2385].

The system described in the '942 patent is a promotional program for credit and other financial cards issued by an entity other than the fuel merchant. ['942 Patent, Doc# 45-11, col 3, ln 20-26]. The system provides an immediate fuel discount as an incentive for increased use of the promoted card. [*Id.* at col. 3, ln 58-60]. In exchange for the benefit of increased use of its cards, the card issuer must fund all or a portion of the cost of the redeemed discounts.

The written description of the '942 patent states:

In the preferred embodiment, a dollar amount of the redeemed discount is calculated by multiplying the PPU discount by the number of units of fuel purchased in the transaction. A clearing mechanism tracks the redeemed discounts, receives or retrieves funds from the card issuer, and credits those funds

to the retail fueling station. Thus, the retail fueling station always receives the posted street price for the fueling transaction. The card issuer funds the discounts from its credit card transaction fees.

[*Id.* at col 4, ln 17-25]. Similarly, the applicant described the invention during prosecution by stating:

The financial card recited in the Applicant's claims is issued by a third-party financial card issuer, not the merchant.... [C]ustomers are provided with the incentive to purchase fuel at the merchant's store and to use the third-party financial card elsewhere because the customers will receive an instant price-perunit (PPU) discount on the fuel. The fuel merchant benefits because fuel sales are increased and because the third-party issuer rebates to the merchant part or all of the redeemed discount. The third-party issuer benefits because customer use of the third-party financial card is increased.

['942 Prosecution History, Doc# 45-15, PageID# 2428-29].

Based on the foregoing, Kroger contends that the disputed claim language means "charging the issuer of the customer's payment card for a portion of the fuel merchant's cost for the redeemed discount." The recited allocation must be between the card issuer and the fuel merchant at which fuel is purchased. ['942 Prosecution History, Doc# 445-12, PageID# 2067 ("[C]laims 1 and 11 specifically recite that the allocation is *between the third-party issuer* of the financial card and the fuel merchant.") (emphasis in original)].

8. allocating the redeemed discount

Kroger believes that the claim language "allocating the redeemed discount," though disputed, should not be construed outside the context of the surrounding claim language as specified in immediately preceding section X.7. When considered in context, and for the reasons stated above in section X.7, the claim language "allocating the redeemed discount" means "charging for a portion of the cost for the redeemed discount."

9. increasing customer use of a third-party financial card issued by a third-party issuer, wherein the third-party financial card is selected from a group consisting of different issuers of credit cards

The above-quoted claim language appears in the preamble of independent claim 9 of the '942 patent. Claim 9 issued from application claim 11 in the '942 patent application. Application claim 11, like claim 1, was specifically amended to recite multiple issuers in an effort to distinguish over the prior art Hisey article cited by the Examiner. Although the language of claim 9, as issued, is different than the language of claim 1, the applicant made the same patentability arguments during prosecution with respect to both. Kroger, therefore, contends that the disputed claim language should be construed in the same manner as the preamble of claim 1 to mean "increasing use of multiple, different payment cards issued to customers by multiple, different issuers that are unrelated to the fuel merchant."

As originally filed, the preamble of application claim 11, which issued as claim 9, merely recited "A system for discounting a price-per-unit (PPU) of fuel at a fuel merchant, said system comprising:" ['942 Prosecution History, Doc# 45-15, PageID# 2465]. The original claim lacked any recitation of multiple card issuers.

Claim 11, like claim 1, was rejected by the Examiner in view of the Hisey prior art article. ['942 Prosecution History, Doc# 45-15, PageID# 2434-35]. The Examiner stated:

Hisey describes a credit card (customer's membership card) loyalty-based system wherein a retailer operates gas stations at many of his retail stores (hypermarketing) and wherein when identified valued customers, carrying co-branded credit cards (financial cards), swipe their cards via the gas pumps, the posted-street price per liter (price per gallon or PPU) rolls backward instantly and displays a discounted price per liter or price per gallon unique to the identified customers.

[*Id*.]. The applicant argued:

The Examiner does cite the Hisey article in which a gas merchant, in cooperation with a private credit card, instantly rolls back the price per gallon when the consumer uses the private card at the pump. However, the fact that the price of a gallon (liter in the reference) rolls back when a particular card is used does not support the claim limitation that the discount **magnitude** is dependent upon the

identity of the card issuer. Nothing in the cited prior art even hints that the magnitude of the discount (roll-back) is dependent upon which card is used. The fact that the magnitude is dependent on the card issuer means that different cards yield different magnitudes of gas discounts. The prior art simply does not address this limitation. Accordingly, independent claims 1 and 11 should be held allowable.

['942 Prosecution History, Doc# 45-14, PageID# 2350]. The Examiner, however, rejected the argument because the asserted limitation did not appear in the language of claim 11. ['942 Prosecution History, Doc# 45-13, PageID# 2122].

In response, the applicant further amended the preamble of application claim 11 as follows:

A system for discounting a price-per-unit (PPU) of fuel at a fuel merchant and increasing customer use of a third-party financial card issued by a third-party issuer, wherein the third-party financial card is selected from a group consisting of <u>different issuers of</u> credit cards and debit cards, said system comprising:

['942 Prosecution History, Doc# 45-12, PageID# 2110]. In addition, the applicant contemporaneously argued:

Claims 1 and 11 have been amended to make it perfectly clear that there can be multiple credit card issuers and each issuer can have an independent PPU discount.... Thus, as amended, all of the claims now recite more clearly that the amount of a discount that a customer receives for fuel is dependent upon the issuer of a credit facility. Accordingly, all customers of the merchant are not treated equally with respect to the amount of discount a customer will receive for fuel purchases. The actual value of the PPU discount depends upon the actual issuer of the credit card.

The prior art cited does not perform such a function and there is no hint whatsoever in the prior art that the PPU discount is dependent upon who the issuer of the credit card is....

...

Hisey teaches that there can be a discount on fuel simply by using a credit card. Certainly, if there is a PPU discount than [sic] there must be an amount set for that discount. However, the claims now clearly recite that there can be multiple credit card issuers and that each issuer can have a different PPU discount if the issuer so desires.

[*Id.* at PageID # 2112-13].

Based upon this prosecution history, it is clear that issued claim 9 of the '942 patent requires the participation of multiple, different card issuers to the same extent as issued claim 1. The applicant amended both claims to refer to a plurality of card issuers and relied upon identical arguments for patentability. The disputed claim language does not cover a system in which payment cards from only a single issuer are eligible for a discount on fuel. Such a system was previously disclosed in the prior art Hisey article relied upon by the Examiner. The applicant specifically amended claim 9 during prosecution to distinguish over Hisey and, therefore, surrendered coverage over that subject matter.

10. a relationship database for associating the identified issuer of the financial card with a stored PPU discount for the fuel, said PPU discount individualized to said issuer

This claim language from independent claim 9 of the '942 patent must be construed because it defines a specific mechanism used by the claimed system to enable each one of the multiple card issuers to have its own discount.

The '942 patent teaches a relationship database (23) for associating the identified issuer of a financial card with a stored price-per-unit discount for fuel. ['942 Patent, Doc# 45-11, Fig. 2, col. 2, ln 20-22, col 5, ln 4-6]. The '942 patent states, "The BIN range from the card number is utilized to identify the card issuer, and at step 14 the dispenser controller retrieves an associated PPU discount from a relationship database." [*Id.* at col 4, ln 41-44]. The stored PPU discount is specific to a single issuer because "[t]he retail fuel merchant may have affinity-type relationships with multiple card issuers, and each relationship may specify a different PPU discount level." [*Id.* at col 4, ln 44-46]. Thus, "[t]he dispenser controller uses the card issuer ID to access a relationship database 23 and retrieve an associated PPU discount." [*Id.* at col 5, ln 4-6].

The disputed claim language was amended during prosecution to add the underlined portions as shown below:

a relationship database for associating the identified issuer of the financial card with a stored PPU discount for the fuel, said PPU discount individualized to said issuer

['942 Prosecution History, Doc# 45-15, PageID# 2426, Doc# 45-12, PageID# 2110]. The applicant's amendment adding the language "said PPU discount individualized to said issuer" is consistent with the Examiner's understanding that the PPU discount referred to in the claim is uniquely associated within the database with just one of a plurality of issuers. ['942 Prosecution History, Doc# 45-12, PageID# 2009]. Under the heading "Reason For Allowance," the Examiner stated:

The prior art taken alone or in combination does not teach the combinations of the claim limitations, as recited in independent claims 1 and 11, or more particularly a method of reading a customer's financial card during a fuel transaction, identifying a third-party issuer of the financial card and a specific PPU (price-per-unit) discount of fuel stored in a database under the financial card issuer identification and providing the specific price-per-unit (PPU) or price-per-gallon (PPG) discount on fuel to the customer as specified by the issuer during a fuel transaction at a participating fuel merchant.

[*Id.* (emphasis added)].

Within the context of the rest of claim 9, the stored "PPU discount" referred to in the disputed claim language must be a specified monetary amount such as ten cents off per gallon, rather than a percentage discount or some other value. Specifically, claim 9 goes on to recite "means for calculating a redeemed discount by *multiplying the dispensed number of units of fuel by the PPU discount* associated with the identified issuer of the financial card," and "means for allocating the redeemed discount between the third-party issuer of the financial card and the fuel merchant." ['942 Patent, Doc# 45-11, col 8, ln 17-23 (emphasis added)]. If the stored PPU discount associated with the issuer is expressed as a percentage, then the redeemed discount for

allocation would be calculated as follows: (X gallons dispensed) * (Y% discount). The product would be a nonsensical, non-monetary number, which cannot be allocated. Instead, the stored PPU discount associated with the issuer must be expressed as a fixed monetary amount. For example, (ten gallons dispensed) * (ten cents per gallon discount) = (\$1.00 redeemed discount), which can be allocated between the issuer and the fuel merchant.

For the reasons stated above, Kroger contends that the disputed claim language means "a database that stores the identity of the third-party financial card issuer in association with a stored price per unit reduction in a specified monetary amount to which a customer is entitled for using the third-party issuer's financial card, where the third party-issuer is unrelated to the fuel merchant."

11. the stored PPU discount is defined in an affinity-type agreement between the fuel merchant and the third party issuer

This claim language from independent claim 9 of the '942 patent was also added by amendment and must be construed because it defines the exact discount amount that must be stored in the relationship database of immediately preceding section X.10. Specifically, the stored price per unit reduction in the database must be the exact amount that is defined in the claimed affinity-type agreement.

Based on Kroger's prior constructions, Kroger therefore contends that the language should mean "the stored price per unit reduction in a specified monetary amount is defined in an affinity-type agreement between a fuel merchant and the issuer that is unrelated to the fuel merchant."

12. means for identifying the third-party issuer of the financial card by analyzing the financial card number

The disputed claim language appears in independent claim 9 of the '942 patent and is drafted in means-plus-function format making it subject to 35 U.S.C. §112, ¶6. The recited function should be construed to be consistent with a system that operates with multiple card issuers, with each card issuer having its own discount. As explained above in sections X.9 and X.10, claim 9 is limited to the system described in the '942 patent that promotes the use of the cards of multiple different card issuers by enabling a different discount for each card issuer. ['942 Patent, Doc# 45-11, col 4, ln 44-46]. The system must therefore be able to distinguish between, for example, card issuer A and card issuer B, so that the correct discount can be provided. It is not enough that an accused system determine that a card is entitled to a discount, even if the financial card number is used to make that determination. The claimed means requires the ability to identify and differentiate between multiple issuers. Accordingly, Kroger contends that the disputed claim language requires a *means for* "determining the identity of a specific issuer of the payment card be examining the Bank Identification Number range of the payment card."

The specification of the '942 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. Excentus contends that the corresponding structure is merely an Island Card Reader. [Substitute Joint Claim Construction Chart, Doc# 48-1, PageID# 2514]. A standard island card reader, however, does not perform the recited function, as the card reader simply reads the card and passes on the card number data. Moreover, it is unclear from the specification exactly what structure is involved in "analyzing" the financial card number or how that analysis takes place. Kroger contends, therefore, that the claim is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

13. means for allocating the redeemed discount between the third-party issuer of the financial card and the fuel merchant

The disputed claim language appears in independent claim 9 of the '942 patent and is drafted in means-plus-function format making it subject to 35 U.S.C. §112, ¶6. The recited function in the disputed language is identical to the method step of claim 1 previously addressed in Section X.7 above. Kroger contends that the stated function should be construed in a manner consistent with the method step of claim 1. Accordingly Kroger contends that the disputed claim language requires a *means for* " **charging the issuer of the customer's payment card for a portion of the fuel merchant's cost for the redeemed discount."**

The specification of the '942 patent fails to clearly link corresponding structure for performing the stated function. Excentus also fails to cite to any such link in support of its proposed claim construction. Excentus contends that the corresponding structure is a clearing mechanism that interfaces with a redeemed discounts calculator. [Substitute Joint Claim Construction Chart, Doc# 48-1, PageID# 2515-16]. However, the clearing mechanism is shown only as a generic block (27) in the simplified block diagram of Fig. 2 and the specification never uses the term "allocating" or any variation of that term when referring to Fig. 2 or block 27. ['942 Patent, Doc# 45-11].

Regardless of whether the specification contains any structure that could possibly perform the stated function, "the specification is not clear as to the structure that the patentee intends to correspond to the claimed function" which is impermissible. *Medical Instrumentation and Diagnostics Corp.*, 344 F.3d at 1211. The claim, therefore, is invalid for indefiniteness. *Biomedino*, 490 F.3d 946 (Fed. Cir. 2007).

XI. CONCLUSION

For the foregoing reasons, Kroger contends that its proposed claim constructions are supported by the intrinsic evidence and should be adopted by the Court as a matter of law.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on September 20, 2011, a copy of the foregoing was filed electronically. Notice of this filing will be sent to all parties by operation of the Court's Electronic Filing System. Parties may access this filing through the Court's system.

/s/ Jeffrey C. Metzcar
Jeffrey C. Metzcar

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